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<210> 5618

<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

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Asn	Glu	Met	Ser	Thr	Arg	Tyr	Tyr	Gln	Asn	Glu	Arg	Arg	His	Asn	Tyr
			20					25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
			35					40					45		
Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
	50					55				60					
Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
65					70					75				80	
Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
			85					90					95		
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
			100					105					110		
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
			115					120					125		
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
			130					135					140		
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150					155				160	
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
			165							170				175	
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
			180						185				190		
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
			195				200						205		
Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
	210					215						220			
Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230						235			240	
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
			245							250				255	
Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
			260						265					270	
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
			275						280					285	
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
			290						295				300		
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
305					310						315			320	
Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
			325						330					335	
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

[illegible]


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Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp
785      790      795      800
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg
      805      810      815
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu
      820      825      830
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe
      835      840      845
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly
      850      855      860
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe
865      870      875      880
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln
      885      890      895
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His
      900      905      910
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr
      915      920      925
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr
      930      935      940
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile
945      950      955      960
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro
      965      970      975
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp
      980      985      990
Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln
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<210> 5619
 <211> 1219
 <212> DNA
 <213> Homo sapiens

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<400> 5619
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120
cagtgtgccca gctgctagaa aacagggaag atattagcca atatggaatt gccaggttct
180
tcactgaata ttttaacagt gtatgccagg gaacacacat tctctttcga gaattcagct
240
tcgtccaagc cccccccac aatagggtat catttttacg ggccttctgg agatgcttcc
300
gaactgtggg caaaaatggc gatttgctga ccatgaaaga atatcactgt ttgctgcaat
360
tactgtgtcc tgatttcccg ctggagctca ctcagaaagc agccaggatt gtgctcatgg
420
acgatgccat ggactgcttg atgtcttttt cagatttctc ctttgccttc cagatccagt
480
tttactactc agaattcctg gacagtgtgg ctgccatcta tgaggacctg ctgtcaggca
540

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agaaccccaa cacagtgatt gtgccgacgt cgtccagtgg gcagcaccgc caacgacctg
 600
 ccttggggcg ggccggcacg ctggaggcg tggaggcgtc gctgttctac cagtgtcttg
 660
 aaaacctgtg tgatcggcac aagtacagct gcccaccccc agcacttgtc aaagaggccc
 720
 tcagcaatgt tcagagactg accttctatg gattcctcat ggtctctca aagcaccgtg
 780
 gaatcaacca agccctcggg aagtcagagc taagcagccg tcagcctctc ctgccgcaca
 840
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 900
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 960
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<210> 5620

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5620

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Gln	Arg	His	Val	Leu	Thr	Tyr	Met	Glu	Asp	Ala	Val	Cys	Gln	Leu	Leu
			20					25					30		
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
			35				40					45			
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
			50			55				60					
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65				70					75					80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85					90						95	
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
			100				105						110		
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp
			115				120					125			
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
			130			135					140				
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145				150					155					160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165				170							175	
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

			180					185					190				
Thr	Leu	Glu	Gly	Val	Glu	Ala	Ser	Leu	Phe	Tyr	Gln	Cys	Leu	Glu	Asn		
		195					200					205					
Leu	Cys	Asp	Arg	His	Lys	Tyr	Ser	Cys	Pro	Pro	Pro	Ala	Leu	Val	Lys		
	210					215					220						
Glu	Ala	Leu	Ser	Asn	Val	Gln	Arg	Leu	Thr	Phe	Tyr	Gly	Phe	Leu	Met		
225				230						235					240		
Ala	Leu	Ser	Lys	His	Arg	Gly	Ile	Asn	Gln	Ala	Leu	Gly	Lys	Ser	Glu		
				245					250					255			
Leu	Ser	Ser	Arg	Gln	Pro	Leu	Leu	Pro	His	Asn	Thr	Gly	Ser	Ser	Trp		
		260						265					270				
Pro	Leu	Leu	Ala	Thr	Arg	Leu	Gln	Arg	Gly	Arg	Gly	Ile	Thr	Ile	Ser		
	275					280						285					
Ala	Leu	Thr	Ser	Gln	Gly	Arg	Thr	Gln	Ser	Gln	Gly	Ala	Gly	Ile	Trp		
	290					295					300						
Arg	Gln	Asn	Met	Ala	Leu	Thr	His	Ser	His	Gly	Arg	Gly	Gln	Pro	Ser		
305				310						315					320		
Leu	Pro	Ala	Ala	Leu	Pro	Gln	His	Glu	Thr	Thr	Ser	Pro					
			325					330									

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<210> 5621
<211> 456
<212> DNA
<213> Homo sapiens
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<400> 5621
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120
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accgtcagga ggtggctcct gggagcttgg ctgaaccctg ggcggtggcc cttcccggct
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456

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<210> 5622
<211> 82
<212> PRT
<213> Homo sapiens
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<400> 5622

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Ile	Cys	Gly	Ala	Gly	Ser	Pro	Gln	Pro	Gly	Arg	Ala	Thr	Ala	Thr	Val
			20				25					30			
Gln	Ser	Ser	Phe	Arg	Ala	Pro	Ser	Phe	Met	Gly	Pro	Leu	Ala	Thr	Phe

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      35          40          45
Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
  50          55          60
Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
  65          70          75          80
Thr Gly

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<210> 5623
 <211> 357
 <212> DNA
 <213> Homo sapiens

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<400> 5623
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gcctttgatg attttcaaga gagttgtgct atgatgtggc aaaagtatgc aggaagcagg
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cgggtcaatgc ctctgggagc aaggatcctt ttccacgggtg tgttctatgc cgggggcttt
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gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
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 357

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<210> 5624
 <211> 88
 <212> PRT
 <213> Homo sapiens

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<400> 5624
Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
  1          5          10          15
Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
  20          25          30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
  35          40          45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
  50          55          60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
  65          70          75          80
Val Asp Ile Val Asp Ala Lys Leu
  85

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<210> 5625
 <211> 1017
 <212> DNA
 <213> Homo sapiens

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<400> 5625
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 420
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 720
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 1017

<210> 5626

<211> 339

<212> PRT

<213> Homo sapiens

<400> 5626

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Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
		35					40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
		50				55					60				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
					70					75				80	
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
			85						90					95	
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100					105					110		
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

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      115      120      125
Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys
      130      135      140
Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu
      145      150      155      160
Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met
      165      170      175
Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln
      180      185      190
Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg
      195      200      205
Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln
      210      215      220
Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Cys Ile Gln
      225      230      235      240
Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala
      245      250      255
Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr
      260      265      270
Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala
      275      280      285
Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met
      290      295      300
Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu
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His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu
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Gln Glu Ile

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<210> 5627

<211> 1401

<212> DNA

<213> Homo sapiens

<400> 5627

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540

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<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

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Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
		20						25					30		
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
		35					40					45			
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50					55					60				
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
	65				70				75					80	
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85					90						95	
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
			100					105					110		
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
		115					120					125			
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

130	135	140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys		
145	150	155
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu		
165	170	175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg		
180	185	190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile		
195	200	205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser		
210	215	220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly		
225	230	235
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu		
245	250	255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp		
260	265	270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro		
275	280	285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr		
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<210> 5629

<211> 428

<212> DNA

<213> Homo sapiens

<400> 5629

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120

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180

ttttacgagg atgccatact gccacaatgg atggtgtctt tatctcctga tatatgattg

240

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300

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428

<210> 5630

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5630

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5

10

15

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Arg	Gly	Xaa	Ala	Ala	Ile	Gln	Val	Trp	Asp	Cys	Gly	Thr	Pro	Glu	Pro
	35						40					45			
Met	Phe	Phe	Thr	Arg	Met	Pro	Tyr	Cys	His	Asn	Gly	Trp	Cys	Leu	Tyr
	50					55					60				
Leu	Leu	Ile	Tyr	Asp	Cys	Val	Leu	Gly	Gly	Val	Gly	Trp	Gln	Leu	Glu
65					70					75				80	
Glu	Trp	Arg	Gly	Ile	Phe	Val	Glu	Asp	Leu	Pro	Pro	Phe	Ser	Ala	Thr
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Leu	Ser	Trp	Ser	Ser	Gln	Phe	His	Leu	Arg	Asn	Tyr	Leu	Leu		
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<210> 5631

<211> 783

<212> DNA

<213> Homo sapiens

<400> 5631

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 660
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 783

<210> 5632

<211> 183

<212> PRT

<213> Homo sapiens

<400> 5632

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 Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val
 35 40 45
 Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg
 50 55 60
 Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Thr Ser Ser Ser
 65 70 75 80
 Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro
 85 90 95
 Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys
 100 105 110
 Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr
 115 120 125
 Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser
 130 135 140
 Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser
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 165 170 175
 Glu Arg Thr Thr Thr Val
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<210> 5633

<211> 2181

<212> DNA

<213> Homo sapiens

<400> 5633

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<210> 5634

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5634

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Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
 35           40           45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
 50           55           60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
 65           70           75           80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
 85           90           95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
260          265          270
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275          280          285
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<210> 5635

<211> 614

<212> DNA

<213> Homo sapiens

<400> 5635

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180

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 360
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 420
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 480
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<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

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			20					25					30		
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn
			35				40					45			
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu
	50					55				60					
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu
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His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe
				85					90					95	
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys
			100					105					110		
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn
			115				120					125			
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala
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Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys
145					150					155					160
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala
				165					170					175	
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<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens

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<210> 5638
<211> 132
<212> PRT
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<400> 5638
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35 40 45
Leu Ala Gly Arg Leu Ala Arg Ala Pro Leu Trp Leu Ala Cys Gly Asp
50 55 60
Thr Trp Ala Leu Leu His Val Pro Thr Arg Ala Val Ala Gly Ser Lys
65 70 75 80
Glu Ala Gln Pro Arg Pro Ala Cys Val Asp Pro Ala Gly Leu Arg Ala
85 90 95
Pro Glu Leu Leu Thr Val Ser Glu Pro Gly Cys Pro Ala Pro Arg Arg
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Pro Pro Ser Ser Cys Pro Ala Trp Asp Pro Ser Ala Val Cys Leu Leu
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Asn Gln Gly Val

130

<210> 5639

<211> 2433

<212> DNA

<213> Homo sapiens

<400> 5639

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1380

4818

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 1860
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 1980
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<210> 5640

<211> 540

<212> PRT

<213> Homo sapiens

<400> 5640

Met	Cys	Pro	Ser	Pro	Glu	Arg	Gln	Glu	Asp	Gly	Ala	Arg	Lys	Asp	Phe
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Ser	Ser	Arg	Leu	Ala	Ala	Gly	Pro	Thr	Phe	Gln	His	Phe	Leu	Lys	Ser
			20				25						30		
Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser	Ser	Glu	Val	Glu	Asp	Pro	Pro
			35				40					45			
Pro	Tyr	Leu	Met	Met	Asp	Glu	Leu	Leu	Gly	Arg	Gln	Arg	Lys	Val	Tyr
			50			55				60					
Leu	Glu	Thr	Tyr	Gly	Cys	Gln	Met	Asn	Val	Asn	Asp	Thr	Glu	Ile	Ala
					70				75					80	
Trp	Ser	Ile	Leu	Gln	Lys	Ser	Gly	Tyr	Leu	Arg	Pro	Val	Thr	Ser	Lys

85 90 95
 Ala Asp Val Ile Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu
 100 105 110
 Gln Thr Ile Trp Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg
 115 120 125
 Arg Pro Arg Ser Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met
 130 135 140
 Ala Glu Arg Leu Lys Glu Glu Ile Leu Asn Arg Glu Lys Met Val Asp
 145 150 155 160
 Ile Leu Ala Gly Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala
 165 170 175
 Val Ala Glu Ser Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp
 180 185 190
 Glu Thr Tyr Ala Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr
 195 200 205
 Ser Ala Phe Val Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr
 210 215 220
 Cys Ile Val Pro Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala
 225 230 235 240
 Ser Ile Leu Glu Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu
 245 250 255
 Val Thr Leu Leu Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu
 260 265 270
 Val Gln Phe Asn Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr
 275 280 285
 Thr Asn Tyr Lys Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu
 290 295 300
 Asp Gln Val Ser Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser
 305 310 315 320
 Pro His Pro Lys Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu
 325 330 335
 Arg Asp Asn Ile Cys Lys Gln Ile His Leu Pro Ala Gln Ser Gly Ser
 340 345 350
 Ser Arg Val Leu Glu Ala Met Arg Arg Gly Tyr Ser Arg Glu Ala Tyr
 355 360 365
 Val Glu Leu Val His His Ile Arg Glu Ser Ile Pro Gly Val Ser Leu
 370 375 380
 Ser Ser Asp Phe Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His
 385 390 395 400
 Val Gln Thr Val Ser Leu Leu Arg Glu Val Gln Tyr Asn Met Gly Phe
 405 410 415
 Leu Phe Ala Tyr Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu
 420 425 430
 Lys Asp Asp Val Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu
 435 440 445
 Ile Thr Ile Phe Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val
 450 455 460
 Gly Cys Thr Gln Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala
 465 470 475 480
 Thr Asp Leu Cys Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro
 485 490 495
 Asp Ala Glu Met Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala
 500 505 510
 Gln Pro Gly Asp Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu

515
520
525
 Arg His Leu Gly Asp Met Phe Ser Ala Gly Pro Leu
530
535
540

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<210> 5641
<211> 293
<212> DNA
<213> Homo sapiens
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<400> 5641
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ttctgtggcc acgcgtccaa aaccaatcag gtcaactcgg gcgggtgtgct gctgagggtg
120
caggtggggcg aggaggtgtg gctggctggg gcacccctcg catccctgga gagccagggtg
180
aggagggcgag atacaagcag aaattccagt cagtgttcac ggtcactcgg cagaccacc
240
agcccccctgc acccaacagc ctgatcagat tcaacgcggg cctcaccaac ccg
293

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<210> 5642
<211> 87
<212> PRT
<213> Homo sapiens
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<400> 5642
Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val
 1                    5                10                15
Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn
 20                25                30
Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu
 35                40                45
Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp
 50                55                60
Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr
 65                70                75                80
Ser Pro Leu His Pro Thr Ala
 85

```

```
<210> 5643
<211> 1218
<212> DNA
<213> Homo sapiens
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```
<400> 5643
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caaaataaca tggcagccag acgaattaca caggagactt ttgatgctgt attacaagaa
120
aaagccaaac gatatcacat ggatgccagt ggtgaggctg taagcgaaac tcttcagttt
180
aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc
240
```

cacagcgatg gcagatactc cctcagtgga tctgtagctc actctagaga tgccggaaga
 300
 gaaggcctga gaagtgaagt atttccaggg ccttccttca gatcaagcaa cccttccatc
 360
 agtgatgaca gctactttcg caaagaatgt ggccgggcatc tggaattttc tcaactctgat
 420
 tctcggggacc aggtcattgg ccaccggaaa ttggggcatt tccgtttctca ggactggaaa
 480
 tttgcgctcc gtgggttcttg ggaacaagac tttggccatc cagttttctca agagtccctt
 540
 tggtcacagg agtatagttt tggtcctctt gcagttttgg gggacttttg atcttccagg
 600
 ctgattgaga aagagtgttt ggagaaggag agtcgggatt atgacgtgga ccatcctggg
 660
 gaggtgact ctgtgcttag gggcagcagt caagtccagg ccagaggctg agctctaaac
 720
 atcgttgacc aggaaggttc cctcctagga aagggggaga ctcagggcct gctcacagct
 780
 aaggggggtg ttgggaaact tgtcacattg agaaatgtga gcacaaaaaa aatacccacc
 840
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 1020
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 1080
 ttccacacca taaaattaga ttattaaatt tttccaaac ttttccagac tctctttgaa
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 1200
 cacagagatt tttgcttt
 1218

<210> 5644

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5644

Trp Glu Gln Asp Phe Gly His Pro Val Ser Gln Glu Ser Ser Trp Ser
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 Gln Glu Tyr Ser Phe Gly Pro Ser Ala Val Leu Gly Asp Phe Gly Ser
 20 25 30
 Ser Arg Leu Ile Glu Lys Glu Cys Leu Glu Lys Glu Ser Arg Asp Tyr
 35 40 45
 Asp Val Asp His Pro Gly Glu Ala Asp Ser Val Leu Arg Gly Ser Ser
 50 55 60
 Gln Val Gln Ala Arg Gly Arg Ala Leu Asn Ile Val Asp Gln Glu Gly
 65 70 75 80
 Ser Leu Leu Gly Lys Gly Glu Thr Gln Gly Leu Leu Thr Ala Lys Gly
 85 90 95
 Gly Val Gly Lys Leu Val Thr Leu Arg Asn Val Ser Thr Lys Lys Ile

```

      100      105      110
Pro Thr Val Asn Arg Ile Thr Pro Lys Thr Gln Gly Thr Asn Gln Ile
      115      120      125
Gln Lys Asn Thr Pro Ser Pro Asp Val Thr Leu Gly Thr Asn Pro Gly
      130      135      140
Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
145      150      155      160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
      165      170      175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
      180      185      190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
      195      200

```

<210> 5645
 <211> 156
 <212> DNA
 <213> Homo sapiens

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<400> 5645
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cctcagatca gcttcccctc tcccaggcaa gaggacacga gcactggcaa gttcacctgc
120
aaagtccccg gcctctacta ctttgtctac cgcgcg
156

```

<210> 5646
 <211> 52
 <212> PRT
 <213> Homo sapiens

```

<400> 5646
Pro Arg Pro Ser Arg Arg Arg Asn Cys Arg Trp Ala Val Phe Gly Leu
1      5      10      15
Ala Gln Arg Cys Pro Gln Ile Ser Phe Pro Ser Pro Arg Gln Glu Asp
      20      25      30
Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
      35      40      45
Val Tyr His Ala
50

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<210> 5647
 <211> 150
 <212> DNA
 <213> Homo sapiens

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<400> 5647
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aagggagaac ccggcttacc cggccatccn
150

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<210> 5648
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 5648
 Pro Met Gly Pro Gly Thr Leu Ala Phe Pro Gly Gly Pro Met Gly Pro
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 Phe Phe Pro Gly Arg Pro Lys Gly Glu Pro Gly Ile Pro Ala Ile Pro
 20 25 30
 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly
 35 40 45
 His Pro
 50

<210> 5649
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 5649
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 aaccgcctgg tccctcggat cgcgcccagc ccagactcgg actcggacac agactcggag
 120
 gaccgcagtc tccggcgag cgcgggcggc ttgctccgct cgcaggtcat ccacagcggg
 180
 cacttcattg tgctgctgcc gcacagcgac tcgctgcccc ggcggcgcgca ccaggagggg
 240
 ccgtggggcc ctccgacttc gggccgcgca gtatcgaccc cacactcaca cgcctcttcg
 300
 agtgcttgag cctggcctac agtggaagc tggggtctcc caagt
 345

<210> 5650
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 5650
 Met Ala Val Ala Ala Thr Ala Trp Ser Leu Gly Ser Arg Pro Ala
 1 5 10 15
 Gln Thr Arg Thr Arg Thr Gln Thr Arg Arg Thr Arg Val Ser Gly Ala
 20 25 30
 Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser
 35 40 45
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg
 50 55 60
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His
 65 70 75 80
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala
 85 90 95
 Gly Val Ser Gln

100

<210> 5651
 <211> 615
 <212> DNA
 <213> Homo sapiens

<400> 5651
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 120
 ctgcgccatga agagccgctt tagcaccatt gacctccgcg ccgtactcgc ggagctgaat
 180
 gctagcttgc taggaatgag agtaaacaat gtttatgatg tggataataa gacatacctt
 240
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 300
 catacaacag aatttgagtgc gcctaagaat atgatgccgt ctagtgttgc catgaagtgc
 360
 cgaaaacatt tgaagagtcg gagattagtc agtgcaaac agcttggtgt ggatagaatt
 420
 gtagattttc aatttggaag tgatgaagct gcttaccatt taatcattga gctctatgat
 480
 agggggaaca ttgttcttac agattatgag tacgtaattt taaatattct aaggtttcga
 540
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 600
 agagctgctg aacct
 615

<210> 5652
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 5652
 Met Lys Ser Arg Phe Ser Thr Ile Asp Leu Arg Ala Val Leu Ala Glu
 1 5 10 15
 Leu Asn Ala Ser Leu Leu Gly Met Arg Val Asn Asn Val Tyr Asp Val
 20 25 30
 Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala
 35 40 45
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu
 50 55 60
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys
 65 70 75 80
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp
 85 90 95
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu
 100 105 110
 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu
 115 120 125
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

4825

130	135	140
Val Lys Phe Ala Val Arg Glu Arg Tyr Pro Leu Asp His Ala Arg Ala		
145	150	155
Ala Glu Pro		

<210> 5653
 <211> 1439
 <212> DNA
 <213> Homo sapiens

<400> 5653
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 120
 gttgcagggtg aacttgccag tgctcgtgtc ataatctccc tcggggttggtg tgaggaccgc
 180
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 240
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 300
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 360
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 480
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 660
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 720
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 780
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 1320
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 1439

<210> 5654
 <211> 245
 <212> PRT
 <213> Homo sapiens

<400> 5654
 Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu
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 20 25 30
 Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp
 35 40 45
 Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala
 50 55 60
 Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu
 65 70 75 80
 Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro
 85 90 95
 Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Gly
 100 105 110
 Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr
 115 120 125
 His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu
 130 135 140
 Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys
 145 150 155 160
 Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala
 165 170 175
 Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe
 180 185 190
 Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu
 195 200 205
 Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr
 210 215 220
 Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe
 225 230 235 240
 Leu Leu Phe Pro Asp
 245

<210> 5655
 <211> 3810
 <212> DNA
 <213> Homo sapiens

<400> 5655
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480
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2280
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2340
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3810

<210> 5656

<211> 987

<212> PRT

<213> Homo sapiens

<400> 5656

Asp	Leu	Leu	Glu	Asp	Glu	Leu	Leu	Glu	Gln	Lys	Phe	Gln	Glu	Ala
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Val	Gly	Gln	Ala	Gly	Xaa	Pro	Ser	Pro	Ser	Xaa	Ser	Lys	Ala	Glu
			20					25					30	Leu
Ala	Glu	Val	Arg	Arg	Glu	Trp	Ala	Lys	Tyr	Met	Glu	Val	His	Glu
			35				40					45		Lys
Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His
			50				55				60			Val
Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala
						70				75				80
Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln
						85				90				95
Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg
			100					105					110	Val
Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile
			115				120					125		Thr
Ala	Ser	Leu	Val	Thr	Thr	Asp	His	Ser	Glu	Met	Lys	Lys	Leu	Phe
			130				135					140		Glu
Glu	Gln	Leu	Lys	Lys	Tyr	Asp	Gln	Leu	Lys	Val	Tyr	Leu	Glu	Gln
						150				155				Asn
Leu	Ala	Ala	Gln	Asp	Arg	Val	Leu	Cys	Ala	Leu	Thr	Glu	Ala	Asn
			165						170					Val
Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys
			180					185					190	Trp
Asn	Ser	Thr	Leu	Gln	Thr	Leu	Val	Ala	Ser	Tyr	Glu	Ala	Tyr	Glu
			195				200					205		Asp
Leu	Met	Lys	Lys	Ser	Gln	Glu	Gly	Arg	Asp	Phe	Tyr	Ala	Asp	Leu
			210				215				220			Glu
Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln
														Ala

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225          230          235          240
Arg Glu Ala Ala Arg Gln Gln Leu Leu Asp Arg Glu Leu Lys Lys Lys
          245          250          255
Pro Pro Pro Arg Pro Thr Ala Pro Lys Pro Leu Leu Pro Arg Arg Glu
          260          265          270
Glu Ser Glu Ala Val Glu Ala Gly Asp Pro Pro Glu Glu Leu Arg Ser
          275          280          285
Leu Pro Pro Asp Met Val Ala Gly Pro Arg Leu Pro Asp Thr Phe Leu
          290          295          300
Gly Ser Ala Thr Pro Leu His Phe Pro Pro Ser Pro Phe Pro Ser Ser
305          310          315          320
Thr Gly Pro Gly Pro His Tyr Leu Ser Gly Pro Leu Pro Pro Gly Thr
          325          330          335
Tyr Ser Gly Pro Thr Gln Leu Ile Gln Pro Arg Ala Pro Gly Pro His
          340          345          350
Ala Met Pro Val Ala Pro Gly Pro Ala Leu Tyr Pro Ala Pro Ala Tyr
          355          360          365
Thr Pro Glu Leu Gly Leu Val Pro Arg Ser Ser Pro Gln His Gly Val
          370          375          380
Val Ser Ser Pro Tyr Val Gly Val Gly Pro Ala Pro Pro Val Ala Gly
385          390          395          400
Leu Pro Ser Ala Pro Pro Pro Gln Phe Ser Gly Pro Glu Leu Ala Met
          405          410          415
Ala Val Arg Pro Ala Thr Thr Thr Val Asp Ser Ile Gln Ala Pro Ile
          420          425          430
Pro Ser His Thr Ala Pro Arg Pro Asn Pro Thr Pro Ala Pro Pro Pro
          435          440          445
Pro Cys Phe Pro Val Pro Pro Pro Gln Pro Leu Pro Thr Pro Tyr Thr
          450          455          460
Tyr Pro Ala Gly Ala Lys Gln Pro Ile Pro Ala Gln His His Phe Ser
465          470          475          480
Ser Gly Ile Pro Thr Gly Phe Pro Ala Pro Arg Ile Gly Pro Gln Pro
          485          490          495
Gln Pro His Pro Gln Pro His Pro Ser Gln Ala Phe Gly Pro Gln Pro
          500          505          510
Pro Gln Gln Pro Leu Pro Leu Gln His Pro His Leu Phe Pro Pro Gln
          515          520          525
Ala Pro Gly Leu Leu Pro Pro Gln Ser Pro Tyr Pro Tyr Ala Pro Gln
          530          535          540
Pro Gly Val Leu Gly Gln Pro Pro Pro Pro Leu His Thr Gln Leu Tyr
545          550          555          560
Pro Gly Pro Ala Gln Asp Pro Leu Pro Ala His Ser Gly Ala Leu Pro
          565          570          575
Phe Pro Ser Pro Gly Pro Pro Gln Pro Pro His Pro Pro Leu Ala Tyr
          580          585          590
Gly Pro Ala Pro Ser Thr Arg Pro Met Gly Pro Gln Ala Ala Pro Leu
          595          600          605
Thr Ile Arg Gly Pro Ser Ser Ala Gly Gln Ser Thr Pro Ser Pro His
          610          615          620
Leu Val Pro Ser Pro Ala Pro Ser Pro Gly Pro Gly Pro Val Pro Pro
625          630          635          640
Arg Pro Pro Ala Ala Glu Pro Pro Pro Cys Leu Arg Arg Gly Ala Ala
          645          650          655
Ala Ala Asp Leu Leu Ser Ser Ser Pro Glu Ser Gln His Gly Gly Thr

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660 665 670
 Gln Ser Pro Gly Gly Gly Gln Pro Leu Leu Gln Pro Thr Lys Val Asp
 675 680 685
 Ala Ala Glu Gly Arg Arg Pro Gln Ala Leu Arg Leu Ile Glu Arg Asp
 690 695 700
 Pro Tyr Glu His Pro Glu Arg Leu Arg Gln Leu Gln Gln Glu Leu Glu
 705 710 715 720
 Ala Phe Arg Gly Gln Leu Gly Asp Val Gly Ala Leu Asp Thr Val Trp
 725 730 735
 Arg Glu Leu Gln Asp Ala Gln Glu His Asp Ala Arg Gly Arg Ser Ile
 740 745 750
 Ala Ile Ala Arg Cys Tyr Ser Leu Lys Asn Arg His Gln Asp Val Met
 755 760 765
 Pro Tyr Asp Ser Asn Arg Val Val Leu Arg Ser Gly Lys Asp Asp Tyr
 770 775 780
 Ile Asn Ala Ser Cys Val Glu Gly Leu Ser Pro Tyr Cys Pro Pro Leu
 785 790 795 800
 Val Ala Thr Gln Ala Pro Leu Pro Gly Thr Ala Ala Asp Phe Trp Leu
 805 810 815
 Met Val His Glu Gln Lys Val Ser Val Ile Val Met Leu Val Ser Glu
 820 825 830
 Ala Glu Met Glu Lys Gln Lys Val Ala Arg Tyr Phe Pro Thr Glu Arg
 835 840 845
 Gly Gln Pro Met Val His Gly Ala Leu Ser Leu Ala Leu Ser Ser Val
 850 855 860
 Arg Ser Thr Glu Thr His Val Glu Arg Val Leu Ser Leu Gln Phe Arg
 865 870 875 880
 Asp Gln Ser Leu Lys Arg Ser Leu Val His Leu His Phe Pro Thr Trp
 885 890 895
 Pro Glu Leu Gly Leu Pro Asp Ser Pro Ser Asn Leu Leu Arg Phe Ile
 900 905 910
 Gln Glu Val His Ala His Tyr Leu His Gln Arg Pro Leu His Thr Pro
 915 920 925
 Ile Ile Val His Cys Ser Ser Gly Val Gly Arg Thr Gly Ala Phe Ala
 930 935 940
 Leu Leu Tyr Ala Ala Val Gln Glu Val Glu Ala Gly Asn Gly Ile Pro
 945 950 955 960
 Glu Leu Pro Gln Leu Val Arg Arg Met Arg Gln Gln Arg Lys His Met
 965 970 975
 Leu Gln Glu Lys Leu His Leu Arg Xaa Leu Leu
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<210> 5657

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 5657

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 120
 gcctcgggct atgggaccca gaacattcga ctgagccggg atgccgtgaa ggacttcgac
 180

tgctgttgct tctccctgca gccttgccac gatcctgttg tcaccccaga tggctacctg
 240
 tatgagcgtg aggccatcct ggagtacatt ctgcaccaga agaaggagat tgcccggcag
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 420
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 480
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 600
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 1020

<210> 5658

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5658

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 His Glu Lys Lys Lys Asp Thr Ala Ala Ser Gly Tyr Gly Thr Gln Asn
 20 25 30
 Ile Arg Leu Ser Arg Asp Ala Val Lys Asp Phe Asp Cys Cys Cys Leu
 35 40 45
 Ser Leu Gln Pro Cys His Asp Pro Val Val Thr Pro Asp Gly Tyr Leu
 50 55 60
 Tyr Glu Arg Glu Ala Ile Leu Glu Tyr Ile Leu His Gln Lys Lys Glu
 65 70 75 80
 Ile Ala Arg Gln Met Lys Ala Tyr Glu Lys Gln Arg Gly Thr Arg Arg
 85 90 95
 Glu Glu Gln Lys Glu Leu Gln Arg Ala Ala Ser Gln Asp His Val Arg
 100 105 110
 Gly Phe Leu Glu Lys Glu Ser Ala Ile Val Ser Arg Pro Leu Asn Pro
 115 120 125
 Phe Thr Ala Lys Ala Leu Ser Gly Thr Ser Pro Asp Asp Val Gln Pro
 130 135 140
 Gly Pro Ser Val Gly Pro Pro Ser Lys Asp Lys Val Leu Pro

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145          150          155          160
Ser Phe Trp Ile Pro Ser Leu Thr Pro Glu Ala Lys Ala Thr Lys Leu
          165          170          175
Glu Lys Pro Ser Arg Thr Val Thr Cys Pro Met Ser Gly Lys Pro Leu
          180          185          190
Arg Met Ser Asp Leu Thr Pro Val His Phe Thr Pro Leu Asp Ser Ser
          195          200          205
Val Asp Arg Val Gly Leu Ile Thr Arg Ser Glu Arg Tyr Val Cys Ala
          210          215          220
Val Thr Arg Asp Ser Leu Ser Asn Ala Thr Pro Cys Ala Val Leu Arg
          225          230          235          240
Pro Ser Gly Ala Val Val Thr Leu Glu Cys Val Glu Lys Leu Ile Arg
          245          250          255
Lys Asp Met Val Asp Pro Val Thr Gly Asp Lys Leu Thr Asp Arg Asp
          260          265          270
Ile Ile Val Leu Gln Arg Gly Gly Thr Gly Phe Ala Gly Ser Gly Val
          275          280          285
Lys Leu Gln Ala Glu Lys Ser Arg Pro Val Met Gln Ala
          290          295          300

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<210> 5659

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 5659

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120
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180
atttttctct tctgttttca ggtcacatgt gccaatttaa cgaacggtgg aaagtcagaa
240
cttctgaaat caggaagcag caaatccaca ctaaagcaca tatggacaga aagcagcaaa
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420
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480
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600
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660
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720
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780
tatgaccctt caaaaacctg ttaccaggag caaacccaaa gtcattgtatc ctggctctgc
840

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 1020
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 1260
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 1263

<210> 5660

<211> 253

<212> PRT

<213> Homo sapiens

<400> 5660

Val Thr Cys Ala Asn Leu Thr Asn Gly Gly Lys Ser Glu Leu Leu Lys
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 20 25 30
 Lys Asp Leu Ser Ile Ser Arg Leu Leu Ser Gln Thr Phe Arg Gly Lys
 35 40 45
 Glu Asn Asp Thr Asp Leu Asp Leu Arg Tyr Asp Thr Pro Glu Pro Tyr
 50 55 60
 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln
 65 70 75 80
 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys
 85 90 95
 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr
 100 105 110
 Val Lys Leu Asn Leu Leu Ile Thr Gly Lys Ile Val Asp His Gly Asn
 115 120 125
 Gly Thr Phe Ser Val Tyr Phe Arg His Asn Ser Thr Gly Gln Gly Asn
 130 135 140
 Val Ser Val Ser Leu Val Pro Pro Thr Lys Ile Val Glu Phe Asp Leu
 145 150 155 160
 Ala Gln Gln Thr Val Ile Asp Ala Lys Asp Ser Lys Ser Phe Asn Cys
 165 170 175
 Arg Ile Glu Tyr Glu Lys Val Asp Lys Ala Thr Lys Asn Thr Leu Cys
 180 185 190
 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His
 195 200 205
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile
 210 215 220
 Ser Phe Tyr Ser Thr Asp Tyr Lys Leu Val Gln Lys Val Cys Pro Asp
 225 230 235 240
 Tyr Asn Tyr His Ser Asp Thr Pro Tyr Phe Pro Ser Gly

245

250

<210> 5661

<211> 578

<212> DNA

<213> Homo sapiens

<400> 5661

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 120
 ataaccctagt gcacggcaag gaccagcag gaagcaccag ccactggccc cgacctccg
 180
 caccaggac ctgacgggca cttagacaca cacagtggc tgagctcaa ctccagcatg
 240
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 300
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 360
 gggaaatcaa ggcttgaga gatgacttat ccagggtcac gtggcgagac agggacagca
 420
 ccagaaccag acccgagatg tccacgtcaa agtgacatgc tctgagaggc agcacacaca
 480
 gaataacct gcattcaaat tccaggaagc tcttaggggt catccagctg ggcctagggg
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 578

<210> 5662

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5662

Met	Thr	Leu	Leu	Pro	Asp	Pro	Trp	Thr	His	Thr	Ala	Leu	Gly	Thr	Gly
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Cys	Leu	Gly	Ala	Cys	Lys	Ser	Arg	Ala	Pro	Trp	Glu	Pro	Trp	Cys	Met
			20					25					30		
Gly	Pro	Ile	Thr	Gln	Cys	Thr	Ala	Arg	Thr	Gln	Gln	Glu	Ala	Pro	Ala
			35				40					45			
Thr	Gly	Pro	Asp	Leu	Pro	His	Pro	Gly	Pro	Asp	Gly	His	Leu	Asp	Thr
			50			55					60				
His	Ser	Gly	Leu	Ser	Ser	Asn	Ser	Ser	Met	Thr	Thr	Arg	Glu	Leu	Gln
						70				75				80	
Gln	Tyr	Trp	Gln	Asn	Gln	Lys	Cys	Arg	Trp	Lys	His	Val	Lys	Leu	Leu
				85					90					95	
Phe	Glu	Ile	Ala	Ser	Ala	Arg	Ile	Glu	Glu	Arg	Lys	Val	Ser	Lys	Phe
			100					105					110		
Val	Met	Gly	Lys	Ser	Arg	Pro	Gly	Glu	Met	Thr	Tyr	Pro	Gly	Ser	Arg
			115				120					125			
Gly	Glu	Thr	Gly	Thr	Ala	Pro	Glu	Pro	Asp	Pro	Arg	Cys	Pro	Arg	Gln
			130			135					140				
Ser	Asp	Met	Leu												

4836

145

<210> 5663
 <211> 857
 <212> DNA
 <213> Homo sapiens

<400> 5663
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 120
 agacaggagg ctgccgtggt caagaagggc caagccttga agtctcacgg caccctctgt
 180
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 240
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 300
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 360
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 420
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 480
 cttaggatag gggagggttc gaatccgcca ctggaaactc atcttggtgt ccttgcgcat
 540
 gaagatagga ttggcattgc tttccttgat gagttcaggc cccaggttcc ctgctcctag
 600
 gggcgctggg tctcctactt caagctgcca ctggcccatg gctcccaggg cacttttcac
 660
 acgccacttt ctcaacaagta gttcactcgt cttctcgtca tattcttcag ccatttcctt
 720
 gccgtctggg aataaatagt gaaccttcct tctcccgccc tgcagcagcg cagtctcttg
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 840
 gccagccgc tgccatg
 857

<210> 5664
 <211> 203
 <212> PRT
 <213> Homo sapiens

<400> 5664
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 Ala Leu Leu Gln Asp Gly Arg Arg Lys Val His Tyr Leu Phe Pro Asp
 20 25 30
 Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu
 35 40 45
 Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp
 50 55 60
 Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

```

65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
      85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
      100         105         110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
      115         120         125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
      130         135         140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
145         150         155         160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
      165         170         175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
      180         185         190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
      195         200

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<210> 5665
 <211> 531
 <212> DNA
 <213> Homo sapiens

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<400> 5665
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120
cagcgccct ctgaagtcac ttgcttcacg gaggtgttac tgtctgctgc tggacagagc
180
atgatggggg ctgcaagggc tccctcaaac cctggactcc tccaacagag ggctcctggt
240
tgccaggctc agctctgccc tgcgtcgccc ccagggcgta gggaggggt ttaatcctgg
300
cccgggcctt ccccgaggt ggagcgctg tgcacccgc tgcgcagca gcagtatgag
360
ctgtaccggg agcgctgct gcagcgatgc gagcgggccc cggaggagca ggtgctgtac
420
cacggcacga cggcaccggc agtgctgac atctgcgccc acggcttcaa ccgcagcttc
480
tcgggccgca acgccacggt ctacgggaag ggcgtgtatt tcgccaggcg c
531

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<210> 5666
 <211> 79
 <212> PRT
 <213> Homo sapiens

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<400> 5666
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Leu Gln Gln Gln Tyr Glu Leu Tyr Arg Glu Arg Leu Leu Gln Arg Cys
      20      25      30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

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35	40	45
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50	55	60
Arg Asn Ala Thr Val Tyr	Gly Lys Gly Val Tyr Phe Ala Arg Arg	
65	70	75

<210> 5667
 <211> 858
 <212> DNA
 <213> Homo sapiens

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<210> 5668
 <211> 152
 <212> PRT
 <213> Homo sapiens

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35 40 45
 Lys Glu Ile Arg Gln Val Val Arg Met Thr Ser Ala Asn Met Asp Pro
 50 55 60
 Ala Met Met Phe Arg Gln Arg Ser Leu Ser Gln Gly Ser Thr Asn Ser
 65 70 75 80
 Asn Met Leu Asp Val Gln Gly Gly Ala His Lys Lys Arg Ala Arg Arg
 85 90 95
 Ser Ser Leu Leu Asn Ala Lys Lys Leu Tyr Glu Asp Ala Gln Met Ala
 100 105 110
 Arg Lys Val Lys Gln Tyr Leu Ser Ser Leu Asp Val Glu Thr Asp Glu
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<210> 5669

<211> 1842

<212> DNA

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<400> 5669

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<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

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			20					25					30		
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
		35					40					45			
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
	50				55						60				
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65					70				75					80	
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
			85						90					95	
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
			100					105					110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
		115				120							125		
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

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Leu Ser Leu Cys Leu Phe His Gly Asn Ala Leu Glu Arg Arg Lys Phe				
145		150		155
Gly Pro Leu Gly Phe Asn Ile Pro Tyr Glu Phe Thr Asp Gly Asp Leu				
		165		170
Arg Ile Cys Ile Ser Gln Leu Lys Met Phe Leu Asp Glu Tyr Asp Asp				
		180		185
Ile Pro Tyr Lys Val Leu Lys Tyr Thr Ala Gly Glu Ile Asn Tyr Gly				
		195		200
Gly Arg Val Thr Asp Asp Trp Asp Arg Arg Cys Ile Met Asn Ile Leu				
		210		215
Glu Asp Phe Tyr Asn Pro Asp Val Leu Ser Pro Glu His Ser Tyr Ser				
225		230		235
Ala Ser Gly Ile Tyr His Gln Ile Pro Pro Thr Tyr Asp Leu His Gly				
		245		250
Tyr Leu Ser Tyr Ile Lys Ser Leu Pro Leu Asn Asp Met Pro Glu Ile				
		260		265
Phe Gly Leu His Asp Asn Ala Asn Ile Thr Phe Ala Gln Asn Glu Thr				
		275		280
Phe Ala Leu Leu Gly Thr Ile Ile Gln Leu Gln Pro Lys Ser Ser Ser				
		290		295
Ala Gly Ser Gln Gly Arg Glu Glu Ile Val Glu Asp Val Thr Gln Asn				
305		310		315
Ile Leu Leu Lys Val Pro Glu Pro Ile Asn Leu Gln Trp Val Met Ala				
		325		330
Lys Tyr Pro Val Leu Tyr Glu Glu Ser Met Asn Thr Val Leu Val Gln				
		340		345
Glu Val Ile Arg Tyr Asn Arg Leu Leu Gln Val Ile Thr Gln Thr Leu				
		355		360
Gln Asp Leu Leu Lys Ala Leu Lys Gly Leu Val Val Met Ser Ser Gln				
		370		375
Leu Glu Leu Met Ala Ala Ser Leu Tyr Asn Asn Thr Val Pro Glu Leu				
385		390		395
Trp Ser Ala Lys Ala Tyr Pro Ser Leu Lys Pro Leu Ser Ser Trp Val				
		405		410
Met Asp Leu Leu Gln Arg Leu Asp Phe Leu Gln Ala Trp Ile Gln Asp				
		420		425
Gly Ile Pro Ala Val Phe Trp Ile Ser Gly Phe Phe Phe Pro Gln Ala				
		435		440
Phe Leu Thr Gly Thr Leu Gln Asn Phe Ala Arg Lys Phe Val Ile Ser				
		450		455
Ile Asp Thr Ile Ser Phe Asp Phe Lys Val Met Phe Glu Ala Pro Ser				
465		470		475
Glu Leu Thr Gln Arg Pro Gln Val Gly Cys Tyr Ile His Gly Leu Phe				
		485		490
Leu Glu Gly Ala Arg Trp Asp Pro Glu Ala Phe Gln Leu Ala Glu Ser				
		500		505
Gln Pro Lys Glu Leu Tyr Thr Glu Met Ala Val Ile Trp Leu Leu Pro				
		515		520
Thr Pro Asn Arg Lys Ala Gln Asp Gln Asp Phe Tyr Leu Cys Pro Ile				
		530		535
Tyr Lys Thr Leu Thr Arg Ala Gly Thr Leu Ser Thr Thr Gly His Ser				
545		550		555
Thr Asn Tyr Val Ile Ala Val Glu Ile Pro Thr His Gln Pro Gln Arg				

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gaagggaatg	cttggtgccc	aggagctctg	ccagaccctg	aaattgtaag	gatggtttag																			
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agccaagtgg	agtataagag	agggcatgat	gaacgcatct	ccagggttctc	cacgggtggcg																			
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<210> 5672
<211> 220
<212> PRT
<213> Homo sapiens
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<400> 5672																
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			20					25					30			
Cys	Glu	Val	Cys	Lys	Met	Met	Leu	Ser	Val	Asn	Asn	Phe	Val	Ser	His	
		35					40					45				
Gln	Lys	Lys	Pro	Tyr	Cys	His	Ala	His	Asn	Pro	Lys	Asn	Asn	Thr	Phe	
		50				55					60					
Thr	Ser	Val	Tyr	His	Thr	Pro	Leu	Asn	Leu	Asn	Val	Arg	Thr	Phe	Pro	
65					70					75					80	

Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys
 85 90 95
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro
 100 105 110
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly
 115 120 125
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val
 130 135 140
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp
 145 150 155 160
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro
 165 170 175
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu
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 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly
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<210> 5673

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5673

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<210> 5674

<211> 81

<212> PRT

<213> Homo sapiens

<400> 5674

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			20					25					30		
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
		35					40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55				60					
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
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Gln															

<210> 5675

<211> 1074

<212> DNA

<213> Homo sapiens

<400> 5675

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<210> 5676

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5676

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 Ala Cys Phe Arg Arg Gln Gln Asn Arg Thr Gln Pro Ala Val Thr Pro
 35 40 45
 His Ser Arg Ser Arg Arg Thr Ala Ser Arg Met Ser Leu Gly Glu Gln
 50 55 60
 Gly Ser Thr Thr Gly Leu Thr Leu Gly His Arg Ala Pro Ala Pro Trp
 65 70 75 80
 Gly Met Ser Trp His Asn His Arg Arg Gln Val Asn Arg Ile Lys Ser
 85 90 95
 Arg Gln Cys Leu Ser Met Ser Glu Thr Ala Val Ala Arg Ala Trp Pro
 100 105 110
 Arg Ala Ala Gly Pro Ala Leu Ala Ile Ser Pro Gly Leu Ala Arg Gly
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 Gly Leu Gly Leu Thr Pro Arg Thr Arg Cys Pro Gln Arg Val Pro His
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 145

<210> 5677

<211> 477

<212> DNA

<213> Homo sapiens

<400> 5677

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<210> 5678

<211> 151

<212> PRT

<213> Homo sapiens

<400> 5678

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Met Glu Trp Thr Ser Arg Tyr Phe His Met Gln Ile Arg Gly Arg Gly
35     40     45
Ser Gly Gly Cys Gly Lys Lys Ala Asn Trp Gly Arg Gln Gln Gly Phe
50     55     60
Ser Leu Glu Gln Thr Ser Ala Ala Cys Ala Leu Leu Gln Asp Leu His
65     70     75     80
Lys Ala Cys Ile Ala His Gly His Lys Gln Leu Leu Ser Glu Val Asn
85     90     95
Glu Trp Ile Pro Glu Arg Ala Ser Leu Leu His Leu Ala Phe Pro Thr
100    105    110
Ser Asn Pro Leu Gly Gln Arg Gly Gly Val Leu Pro Leu Leu His Gln
115    120    125
Cys Pro Phe Leu Pro Trp Ser Gln Ala Ala Ser Phe Gln His Arg Pro
130    135    140
Leu Gln Arg Gly Thr Ala Ala
145    150

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<210> 5679

<211> 665

<212> DNA

<213> Homo sapiens

<400> 5679

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<210> 5680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5680

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Gln	Thr	Pro	Pro	Asp	Ser	Thr	Ser	Gln	His	Ala	Gly	Ser	Asn	Ser	Thr
			20					25					30		
Ser	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu
		35					40					45			
Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	His	Ser	Ser
	50					55					60				
Leu	Glu	Thr	Thr	Ser	Arg	Gln	Pro	Ala	Phe	Gln	Ala	Leu	Pro	Ala	Pro
65					70				75					80	
Glu	Ile	Arg	Arg	Ser	Ser	Cys	Cys	Leu	Leu	Ser	Pro	Asp	Ala	Asn	Val
			85					90						95	
Lys	Ala	Ala	Pro	Gln	Ser	Arg	Lys	Ala	Glu	Asn	Leu	Gln	Glu	Asn	Pro
			100					105					110		
Pro	Val	Ile	Val	Thr	Arg	Val	Leu	Gln	Ala	Leu	Gly	Thr	Val	Ala	Val
		115					120					125			
Ala	Leu	Gly	Ala	Leu	Gly	Ala	Ala	Tyr	Tyr	Ile	Thr	Glu	Ser	Leu	
	130					135						140			

<210> 5681

<211> 1402

<212> DNA

<213> Homo sapiens

<400> 5681

gggcggcctg gcagctggcg gcattgaggc ggaccgtcta gaggtccgtc tgaccgcggc
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gtcgggacct ggtttccggg catgagctga gagcaccacg ccgaggccac gagtatttca
120
tagacattga tggaagcaga aacccaaact cttcccctgg agaatgcac catcctttca
180
gagggtcttc tgcaggaagg acaccgatta tggattggca acctggaccc caaaattacc
240
gaataccacc tcctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc
300
ttccacaagt cagggtcttt ggagggacag cctcgaggct actgttttgt taactttgaa
360
actaagcagg aagcagagca agccatccag tgtctcaatg gcaagttggc cctgtccaag
420
aagctggtgg tgcgatgggc acatgctcaa gtaaagagat atgatcataa caagaatgat
480
aagattcttc caatcagtct cgagccatcc tcaagcactg agcctactca gtctaaccta
540
agtgtcactg caaagataaa agccattgaa gcaaaactga aaatgatggc ggaaaatcct
600
gatgcagagt atccagcagc gcctgtttat tcctacttta agccaccaga taaaaaagg
660
actactccat attctagaac agcatggaaa tctcgaagat gatggttggt aattactgta
720
gcagcaaaag caaattggtc tccacaccta aaatcgtctg cctgtgtact ttgtagatgt
780
gaatgggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg
840
gatgttctta tggatgtttc ttccctaaac tatgtatgga attgagcatc atccagaata
900
aatagcgttg tatcccaaat tgtgatttga accctgggat gctctaattg gctggttggt
960
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1020
atattattta aatcaggaaa ctaaaaatat taacatctat taaaaaattg agcatttttc
1080
tacgctcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgagag
1140
acagatttta aatcatgttc agaactgttg ttccagaatt tactacggca atccctccaa
1200
ctggactgaa aaagagaaaag ttcttgga aaaggagctg attctttgaa caaatgttgt
1260
agtaatctgt ttaagaatta tgcttattgt ttcaaaatcc caactaggaa aacatggtgt
1320
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1380
cacaagttct atttgggata tt
1402

<210> 5682

<211> 190

<212> PRT

<213> Homo sapiens

<400> 5682

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Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu
 1           5           10           15
Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
 20           25           30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
 35           40           45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
 50           55           60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
 65           70           75           80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
 85           90           95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
100           105           110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
115           120           125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
130           135           140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
145           150           155           160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
165           170           175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
180           185           190

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<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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ggatccatgc gttgccctag ggaggcctca gctgtcaagc actgaccatc tctgcagaca
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cgcagggctg acctgtactg gtgagtaagc attagccatg ggacgcacac aatccagcca
120
atgctttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tgggtaaaag tagggaaata cagtgttcca ggcatagga atggtgctct
240
gggtagaaaa gttttatttg ctggtgggag gcagggtttg ttaataaagc tttgaaatac
300
acaaatttca ttctggatgc tgatgctg
328

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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

```

Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

```

```

      1           5           10           15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20           25           30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35           40           45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50           55           60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65           70           75           80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85           90           95
Ser Leu Gly Gln Arg Met Asp
      100

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<210> 5685

<211> 604

<212> DNA

<213> Homo sapiens

<400> 5685

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ccatgcagcc gcgtgggtgg caagcgggtg gtgtgctatg acgacagatt cattgtgaag
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ctggcctacg agtctgacgg gatcgtggtt tccaacgaca cataccgtga cctccaaggc
120
gagcggcagg agtgggaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggccctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtgga gctgggggct gggctctgcg gggccctgtg gccatgggag
300
gttgcgggtc ttggctccag gcagctttga gagtgagacg gatagctcac cacataggag
360
aaatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatggttc caggtggcct ctctacgaac
480
caacatggca tctctcgagc agaggccatg ggccagtggg tgcgggctgc catccccga
540
cgacttcagg gagggagttc ccctaaaggt gcccatgggc tgtggccctc tagaccgggg
600
atcc
604

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<210> 5686

<211> 69

<212> PRT

<213> Homo sapiens

<400> 5686

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Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
      1           5           10           15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20           25           30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

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35 40 45
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val
 50 55 60
 Pro Ser Gln Arg Pro
 65

<210> 5687
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 5687
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 60
 ccccggtctt gcattgcacgc ctgcgtgaac accccgggct cttcccggtg cactgcccc
 120
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc
 180
 ctgcagccgg tgtccccca ggggaccaca tgcattcaaca ccggtggaag cttccagtgt
 240
 gtcagccctg agtccccga gggcagcggc aatgtgagct acgtgaagac gtctccattc
 300
 cagtgtgagc ggaacccctg ccccatgg
 328

<210> 5688
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 5688
 Thr Leu Ser Arg Pro Arg Gly Ala Gly Lys Gly Gly Gly Asp Gly Gly
 1 5 10 15
 Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro
 20 25 30
 Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp
 35 40 45
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val
 50 55 60
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Ser Phe Gln Cys
 65 70 75 80
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys
 85 90 95
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met
 100 105

<210> 5689
 <211> 1897
 <212> DNA
 <213> Homo sapiens

<400> 5689
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 60

tgaacaatca gaatcataga agagtgtgag cactggtcct ttgtcttcca ggtgggacag
120
tgtgtggtgg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac
180
tctcgcccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta
240
ccgctctcag tctccagtaa gaagcatgga tgaagctcct tgtgttaacg gccgctgggg
300
aacactgaga cccagggtc aaaggcagac tcctcaggtt cccgggaagg gagcctttcc
360
ccagccagag gagacggctc tcctatcctc aatggtggga gtttgtctcc aggaacggca
420
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct
480
gctgtgaag gatacgacct gaaaatagga ctttctttgg cccccgacg aggatcaacc
540
agatcagaaa gatctgagat taggatccat agatctgaat tgggatctaa acccgcttcc
600
agtagtaatc ccatggatgg catggacaat aggacagttg ggggaagtat gagacaccct
660
cctgaacaga caaatggtgt gcatacccca cctcacgtgg ccagtgcctt tgcagggggc
720
gtctccccag gtgccctgcg tcggagtctg gaagccatca aagcgatgtc ctccaaaggc
780
ccctcggcct ctgcagcact aagtcctcct cttgggtctt ctccaggctc tcctggggagc
840
cagagtttga gcagtggaga aacagtgtcc atccctcgcc cagggcctgc ccaaggagat
900
ggacattcct tacctcccat tgctcgccgc ctgggccacc accctccaca gtccctaaat
960
gttggcaaac ccctatacca gagtatgaac tgcaagccca tgcagatgta cgtgctggac
1020
attaaagaca ccaaggagaa ggggcgggtc aaatggaaag tatttaatag cagttctgtg
1080
gttggacctc ctgaaaccag cctgcatacc gtggtacaag gcaggggtga actcatcata
1140
tttggaggac tcatggacaa gaaacagaat gtgaagtact atccaaaaac aaacgccttg
1200
tactttgtac gagcaaagag ataatgtgtt ctaaaccctt ttccttttct gtggccttta
1260
atttgaatt ttccagtgtg taagcatttg gactgagaat tgggaaaaca aaattactcc
1320
cagaagccaa aactctttaa ttcccaaccg aagtcactcc aggctgggat caaatctcca
1380
ttaagaaaaa aaattatata taaatatata tatatatatt atatagccaa ctctgttgac
1440
aaaaaaaggg agagatttcc atcctgggtc agataaagtt gttgctgtgt tttaacaggg
1500
gctgggctgc ctttttctac cttgctggta actagaccaa gaagttagag aatagactaa
1560
catcagtaac ttcccaaaag aaactgaaga gcccctgta aatctttatg tggccttctt
1620
ggagttaaaa aatgaaaggg catatgtaag ttgcaaaggt ggagggtttt agactctcat
1680

gcttcagggtg ctgtcgggggt aaaagtaact gtttttcccc ttctcttaaa accacagagg
 1740
 acctgtgaca gctctgcaga aatgccagtg cctggccccc tcttgccctt tatggctgag
 1800
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 1860
 gtttatgcag ccaacatctg aaaaaaaaaa aaaaaaa
 1897

<210> 5690
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 5690
 Thr Ile Arg Ile Ile Glu Glu Cys Glu His Trp Ser Phe Val Phe Gln
 1 5 10 15
 Val Gly Gln Cys Val Val Val Phe Ser Gln Ala Pro Ser Gly Arg Ala
 20 25 30
 Pro Leu Ser Pro Ser Leu Asn Ser Arg Pro Ser Pro Ile Ser Ala Thr
 35 40 45
 Xaa Ser Ser Ser Arg Ser
 50

<210> 5691
 <211> 1227
 <212> DNA
 <213> Homo sapiens

<400> 5691
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 aaccgtcctg tggagggtga ccagtacagc acagaaccca tcaacacatt ccatgggata
 120
 catcaaaacg aggacgaacc cattcgtgtt agctaccatc ggaatatcca ctataattca
 180
 gtgggtgaatc ctaacaaggc caccattggt gtggggctgg gctgccatca ttcaaaccag
 240
 ggtttgcaga gcagtctctg atgaagaatg ccataaaaac atcggaggag tcatggattg
 300
 aacagcagat gctagaagac aagaaacggg ccacagactg ggaggccaca aatgaagcca
 360
 tcgaggagca ggtggctcgg gaatcctacc tgcagtgggt gcgggatcag gagaaacagg
 420
 ctgccagggt ccgaggcccc agccagcccc ggaaagccag cgccacatgc agttcggcca
 480
 cagcagcagc ctccagtggc ctggaggagt ggactagccg gtccccgcgg cagcggagtt
 540
 cagcctcgtc acctgagcac cctgagctgc atgctgaatt gggcatgaag ccccttccc
 600
 caggcaactg tttagctctt gccaaacctc cttcgccctg tgcgccaggt acaagcagtc
 660
 agttctcgcc aggggcccgc cgggcaactt ccccccttgt gtccctctac cctgctttgg
 720

agtgccgggc cctcattcag cagatgtccc cctctgcctt tggcttgaat gactgggatg
 780
 atgatgagat cctagcttcg gtgctggcag tgtcccaaca ggaataccta gacagtatga
 840
 agaaaaacaa agtgcacaga gacccgcccc cagacaagag ttgatggaga cccagggatt
 900
 ggacaccatc tcccaacccc agggattcgg gcaagggtgc cgaagataga caagaggcac
 960
 acagagacag accaactggc agccaggcag cccagagga gagagacatt cagacagagg
 1020
 aaagtctccc tgcccctcat tctttccaag atgagaaaaa cttgcccga cccccgaca
 1080
 ctgatgccag ggaggtggga ggaagaagtg ggaaatttcc cttcccagta cccccaagaa
 1140
 cgtctgagcc ttcaatgttg aattttttct ttattaaaat tacttttatc ttataaaatc
 1200
 aactaatcaa aaatgaaaaa aaaaaaa
 1227

<210> 5692

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5692

Lys	Arg	Lys	Asn	Asn	Cys	His	Gly	Asn	His	Ile	Glu	Met	Gln	Ala	Met
1				5					10					15	
Ala	Glu	Met	Tyr	Asn	Arg	Pro	Val	Glu	Val	Tyr	Gln	Tyr	Ser	Thr	Glu
			20					25					30		
Pro	Ile	Asn	Thr	Phe	His	Gly	Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile
		35				40					45				
Arg	Val	Ser	Tyr	His	Arg	Asn	Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro
	50				55					60					
Asn	Lys	Ala	Thr	Ile	Gly	Val	Gly	Leu	Gly	Cys	His	His	Ser	Asn	Gln
65				70				75						80	
Gly	Leu	Gln	Ser	Ser	Leu										
				85											

<210> 5693

<211> 389

<212> DNA

<213> Homo sapiens

<400> 5693

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 120
 tccaaccccg cagggcccct cgtcggggcg tcccaactta gtctctccct gacgcggcct
 180
 ctggggccctc ccgggttggg gagctgacgg cagcttcccc ccacagggtc ctctgagcct
 240
 cggaacatga tctacatgag ccgcttgggt atctggggcg agggcacacc cttccggaac
 300

tttgaggagt tctgcacgc catcgagaag aggggcgttg gcgccatgga gatcgtggcc
 360
 atggacatga aggtcagcgg gcatgtaca
 389

<210> 5694
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 5694
 Arg Gln Leu Pro Pro Thr Gly Ala Ser Glu Pro Arg Asn Met Ile Tyr
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 Met Ser Arg Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Asn Phe
 20 25 30
 Glu Glu Phe Leu His Ala Ile Glu Lys Arg Gly Val Gly Ala Met Glu
 35 40 45
 Ile Val Ala Met Asp Met Lys Val Ser Gly His Val
 50 55 60

<210> 5695
 <211> 1417
 <212> DNA
 <213> Homo sapiens

<400> 5695
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 gccttgccggc aagccctaac cttttccctg ttggagcagc ccccggttga ggcagaagag
 120
 cccccagata gggggactga tggcaaggcc cagctgggtg tgcactcggc ctttgagcag
 180
 gatgtggagg agctggaccg ggcgctcagg gctgccttgg aggtccacgt ccaggaggag
 240
 acgggtggggc cctggcgccg cacaactgcct gcagagctgc gtgctcgcct ggagcggtgc
 300
 catggtgtga gtgttgccct gcgtggtgac tgcaccatcc tccgtggctt cggggccac
 360
 cctgcccgtg ctgcccgcga cttggtggca cttctggctg gcccttggga tcagagtttg
 420
 gcctttccct tggcagcttc aggcctacc ttggcggggc agacgctgaa ggggccctgg
 480
 aacaacctgg agcgtctggc agagaacacc ggggagttcc aggaggtggg gcgggccttc
 540
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 600
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 720
 tgcgcccacg gcttcaaccg cagcttctgc ggccgcaacg ccacggtcta cgggaagggc
 780
 gtgtatttcg ccaggcgcg ctcctctgctg gtgcaggacc gctactcgcc ccccaacgcc
 840

gatggccata aggcgggtgtt cgtggcacgg gtgctgactg gcgactacgg gcagggccgc
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 960
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 1020
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 1320
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<210> 5696

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

Val	Ala	Leu	His	Ser	Leu	Lys	Pro	Gln	Gly	Gln	Val	Gly	Glu	Gln
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Glu	Glu	Ala	Gly	Ala	Leu	Arg	Gln	Ala	Leu	Thr	Phe	Ser	Leu	Leu
		20					25					30		
Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp
		35					40					45		
Lys	Ala	Gln	Leu	Val	Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu
	50					55				60				
Leu	Asp	Arg	Ala	Leu	Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu
65				70					75				80	
Thr	Val	Gly	Pro	Trp	Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala
			85					90					95	
Leu	Glu	Arg	Cys	His	Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys
		100						105					110	
Ile	Leu	Arg	Gly	Phe	Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His
		115				120						125		
Val	Ala	Leu	Leu	Ala	Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro
	130					135				140				
Ala	Ala	Ser	Gly	Pro	Thr	Leu	Ala	Gly	Gln	Thr	Leu	Lys	Gly	Pro
145				150					155					160
Asn	Asn	Leu	Glu	Arg	Leu	Ala	Glu	Asn	Thr	Gly	Glu	Phe	Gln	Glu
			165					170					175	
Val	Arg	Ala	Phe	Tyr	Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile
		180						185					190	
Val	Val	Arg	Val	Glu	Arg	Val	Ser	His	Pro	Leu	Leu	Gln	Gln	Tyr
		195					200					205		
Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro

210	215	220
Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro Ala Val Pro Asp Ile		
225	230	235
Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val		
	245	250
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln		
	260	265
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		
	275	280
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg		
	290	295
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser		
305	310	315
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		
	325	330
Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg		
	340	345
Ala Ser Pro Asp Asp Pro Ser Gly Leu Pro Gly Arg Ser Pro Asp Thr		
	355	360

<210> 5697

<211> 3362

<212> DNA

<213> Homo sapiens

<400> 5697

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 120
 tgggtcccaa aacctccgtg cctgaggaaa ggagcacgtt ttcctatgtg tgcaaaggtg
 180
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<210> 5698

<211> 403

<212> PRT

<213> Homo sapiens

<400> 5698

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Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met		190
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Lys Phe Lys Arg Trp Lys Leu Asn Gly Ala Phe Leu Leu Ile Thr Ala		220
225	230	235
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	260	265
Ala Ile Thr Leu Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala		270
	275	280
Ile Pro Glu Ile His Cys Thr Leu Leu Pro Ala Leu Gln Glu Asn Thr		285
	290	295
Pro Asn Tyr Phe Asp Thr Ser Gln Pro Arg Met Arg Glu Thr Ala Phe		300
305	310	315
Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe		320
	325	330
Ser Met Asp Glu His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn		335
	340	345
Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser		350
	355	360
Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val		365
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His Leu Trp		400

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 <211> 1565
 <212> DNA
 <213> Homo sapiens

<400> 5699
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<210> 5700

<211> 197

<212> PRT

<213> Homo sapiens

<400> 5700

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			20					25					30		
Glu	Pro	Gly	Pro	Glu	Pro	Leu	Pro	Trp	Leu	Gly	Lys	Met	Ala	Gln	Leu

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 Gly Pro Ile Ser Asp Ala Lys Glu Asn Pro Tyr Gly Glu Asp Asp Asn
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 Lys Ser Pro Phe Pro Leu Gln Pro Lys Asn Lys Arg Ser Tyr Ala Gln
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 Asn Val Thr Val Trp Ile Lys Pro Ser Gly Leu Gln Thr Asp Val Gln
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 Lys Ile Leu Arg Asn Ala Arg Lys Leu Pro Glu Lys Thr Gln Thr Phe
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 Tyr Lys Glu Leu Asn Arg Leu Arg Lys Ala Ala Leu Ala Phe Gly Phe
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 Leu Asp Leu Leu Lys Gly Val Ala Asp Met Leu Glu Arg Glu Cys Thr
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 Leu Leu Pro Glu Thr Ala His Pro Asp Ala Ala Phe Gln Leu Thr His
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 Ala Ala Gln Gln Leu Lys Leu Ala Ser Thr Gly Thr Ser Glu Tyr Ala
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 Ser Thr Glu Arg Ile
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<210> 5701

<211> 1885

<212> DNA

<213> Homo sapiens

<400> 5701

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<210> 5702

<211> 348

<212> PRT

<213> Homo sapiens

<400> 5702

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Ala Asp Lys Ile Leu Trp Glu Ile Thr Arg Phe Phe Leu Leu Ala Ile
      115          120          125
Glu Leu Ser Val Ile Ile Leu Gly Leu Ala Phe Gly His Leu Glu Ser
      130          135          140
Lys Ser Ser Ile Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Leu
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Ala Tyr Ser Val Thr Gln Gly Thr Leu Glu Ile Leu Tyr Pro Asp Ala
      165          170          175
His Leu Ser Ala Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln
      180          185          190
Phe Trp Leu Val Ser Ser Cys Phe Phe Phe Leu Val Tyr Ser Leu Val
      195          200          205
Val Ile Leu Pro Lys Thr Pro Leu Lys Glu Arg Ile Ser Leu Pro Ser
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Arg Arg Ser Phe Tyr Val Tyr Ala Gly Ile Leu Ala Leu Leu Asn Leu
      225          230          235          240
Leu Gln Gly Leu Gly Ser Val Leu Leu Cys Phe Asp Ile Ile Glu Gly
      245          250          255
Leu Cys Cys Val Asp Ala Thr Thr Phe Leu Tyr Phe Ser Phe Phe Ala
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Pro Leu Ile Tyr Val Ala Phe Leu Arg Gly Phe Phe Gly Ser Glu Pro
      275          280          285
Lys Ile Leu Phe Xaa Leu Gln Met Pro Ser Gly Arg Asp Arg Gly Ala
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Arg Cys Thr Pro Thr Pro Ala Leu Arg Cys Gly Pro Ala Gly Gly Pro
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<210> 5703
 <211> 1496
 <212> DNA
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<210> 5704

<211> 269

<212> PRT

<213> Homo sapiens

<400> 5704

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 Gln Ile Phe Met Glu Ile Val Gly Val Gln Ser Ala Leu Cys Gly Leu
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Cys Leu Val Val Thr Ile Met Tyr Trp Ser Gly Trp Glu Met Gly Ala
      100          105          110
Val Glu Ala Ile Ser Leu Ser Ile Leu Val Gly Ser Ser Val Asp Tyr
      115          120          125
Cys Val His Leu Val Glu Gly Tyr Leu Leu Ala Gly Glu Asn Leu Pro
      130          135          140
Pro His Gln Ala Glu Asp Ala Arg Thr Gln Arg Gln Trp Arg Thr Leu
      145          150          155          160
Glu Ala Val Arg His Val Gly Val Ala Ile Val Ser Ser Ala Leu Thr
      165          170          175
Thr Val Ile Ala Thr Val Pro Leu Phe Phe Cys Ile Ile Ala Pro Phe
      180          185          190
Ala Lys Phe Gly Lys Ile Val Ala Leu Asn Thr Gly Val Ser Ile Leu
      195          200          205
Tyr Thr Leu Thr Val Ser Thr Ala Leu Leu Gly Ile Met Ala Pro Ser
      210          215          220
Ser Phe Thr Arg Thr Arg Thr Ser Phe Leu Lys Ala Leu Gly Ala Val
      225          230          235          240
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<210> 5705

<211> 768

<212> DNA

<213> Homo sapiens

<400> 5705

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Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	Leu	Ile	Glu	Arg	Asn
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      50      55      60
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Val Glu Leu His Leu His His Asn Pro Trp Asn Cys Asp Cys Asp Ile
      85      90      95
Leu Trp Leu Ala Trp Trp Leu Arg Glu Tyr Ile Pro Thr Asn Ser Thr
      100      105      110
Cys Cys Gly Arg Cys His Ala Pro Met His Met Arg Gly Arg Tyr Leu
      115      120      125
Val Glu Val Asp Gln Ala Ser Phe Gln Cys Ser Ala Pro Phe Ile Met
      130      135      140
Asp Ala Pro Arg Asp Leu Asn Ile Ser Glu Gly Arg Met Ala Glu Leu
      145      150      155      160
Lys Cys Arg Thr Pro Pro Met Ser Ser Val Lys Trp Leu Leu Pro Asn
      165      170      175
Gly Thr Val Leu Ser His Ala Ser Arg His Pro Arg Ile Ser Val Leu
      180      185      190
Asn Asp Gly Thr Leu Asn Phe Ser His Val Leu Leu Ser Asp Thr Gly
      195      200      205
Val Tyr Thr Cys Met Val Thr Asn Val Ala Gly Asn Ser Asn Ala Ser
      210      215      220
Ala Tyr Leu Asn Val Ser Thr Ala Glu Leu Asn Thr Ser Asn Tyr Ser
      225      230      235      240
Phe Phe Thr Thr Val Thr Val Glu Thr Thr Glu Ile Ser Pro Glu Asp
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Thr Thr Arg Lys Tyr Lys Pro Val Pro Thr Thr Ser Thr Gly Tyr Gln
      260      265      270
Pro Ala Tyr Thr Thr Ser Thr Thr Val Leu Ile Gln Thr Thr Arg Val
      275      280      285
Pro Lys Gln Val Ala Val Pro Ala Thr Asp Thr Thr Asp Lys Met Gln
      290      295      300
Thr Ser Leu Asp Glu Val Met Lys Thr Thr Lys Ile Ile Ile Gly Cys
      305      310      315      320
Phe Val Ala Val Thr Leu Leu Ala Ala Ala Met Leu Ile Val Phe Tyr
      325      330      335
Lys Leu Arg Lys Arg His Gln Gln Arg Ser Thr Val Thr Ala Ala Arg
      340      345      350
Thr Val Glu Ile Ile Gln Val Asp Glu Asp Ile Pro Ala Ala Thr Ser
      355      360      365
Ala Ala Ala Thr Ala Ala Pro Ser Gly Val Ser Gly Glu Gly Ala Val
      370      375      380
Val Leu Pro Thr Ile His Asp His Ile Asn Tyr Asn Thr Tyr Lys Pro
      385      390      395      400
Ala His Gly Ala His Trp Thr Glu Asn Ser Leu Gly Asn Ser Leu His
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Pro Thr Val Thr Thr Ile Ser Glu Pro Tyr Ile Ile Gln Thr His Thr
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Lys Asp Lys Val Gln Glu Thr Gln Ile
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<210> 5711

<211> 1142

<212> DNA

<213> Homo sapiens

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 180
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 1142

<210> 5712
 <211> 145
 <212> PRT
 <213> Homo sapiens

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 35 40 45

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
 50 55 60
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys
 85 90 95
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln
 100 105 110
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln
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<210> 5713

<211> 1996

<212> DNA

<213> Homo sapiens

<400> 5713

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<210> 5714

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5714

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		20					25				30				
Val	Ser	Glu	Phe	Phe	Met	Asn	Ala	Lys	Lys	Asn	Lys	Pro	Glu	Trp	Arg
		35				40					45				
Glu	Glu	Gln	Met	Ala	Ser	Ile	Lys	Lys	Asp	Tyr	Tyr	Lys	Ala	Leu	Glu
	50				55				60						
Asp	Ala	Asp	Glu	Lys	Val	Gln	Leu	Ala	Asn	Gln	Ile	Tyr	Asp	Leu	Val
65			70				75				80				
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 100 105 110
 Ser Leu Glu Leu Asp Thr Pro Ser Ser Gln Pro Val Asn Asn His His Ala
 115 120 125
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 His Thr Thr Thr Asp His Ile Pro Glu Lys Lys Phe Lys Ser Glu Ala
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 180 185 190
 Asn Ser Ser Gln Pro Leu Gly Ser Tyr Asn Ile Gly Ser Leu Ser Ser
 195 200 205
 Gly Thr Gly Ala Gly Ala Ile Thr Met Ala Ala Ala Gln Ala Val Gln
 210 215 220
 Ala Thr Ala Gln Met Lys Glu Gly Arg Arg Thr Ser Ser Leu Lys Ala
 225 230 235 240
 Ser Tyr Glu Ala Phe Lys Asn Asn Asp Phe Gln Leu Gly Lys Glu Phe
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 Thr Thr Leu Thr Gln Asn Ala Ser Ser Ser Ala Ala Asp Ser Arg Ser
 275 280 285
 Gly Arg Lys Ser Lys Asn Asn Asn Lys Ser Ser Ser Gln Gln Ser Ser
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 305 310 315 320
 Val Val Gln Glu Ile Ser Gln Gln Thr Thr Val Val Pro Glu Ser Asp
 325 330 335
 Ser Asn Ser Gln Val Asp Trp Thr Tyr Asp Pro Asn Glu Pro Arg Tyr
 340 345 350
 Cys Ile Cys Asn Gln Val Ser Tyr Gly Glu Met Val Gly Cys Asp Asn
 355 360 365
 Gln Asp Cys Pro Ile Glu Trp Phe His Tyr Gly Cys Val Gly Leu Thr
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<210> 5715

<211> 1458

<212> DNA

<213> Homo sapiens

<400> 5715

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<210> 5716

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5716

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 35 40 45
 Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln
 50 55 60
 Pro Leu Leu Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr
 65 70 75 80
 Lys Leu Val Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg Ile Arg Glu
 85 90 95
 Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu
 100 105 110
 Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His
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 Ser Lys Ala His Tyr Tyr Arg Tyr Asp Glu Gln Leu Asn Leu Cys Leu
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 Glu Arg Leu Arg
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<210> 5717

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 5717

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<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

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			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35					40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
	50					55				60					
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70					75				80		
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
			85					90					95		
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
		100					105					110			
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
		115				120					125				
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
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Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
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			165					170					175		
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
		180					185					190			
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	195					200					205				
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225

<210> 5719

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5719

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4884

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 atcctgcgcc tggggccgct tgcctacacg ctccagaagg gccagcgagc agctgggatg
 1860
 gccactgaga gccccagtga cagcccagaa gatggtccag gcctgagtc cttgctctga
 1920
 cagagatgga tctgctagaa ggaacctgga gagcaggacc catggctggg cggctggtga
 1980
 gcagtcacag tgcccaaggg ccagcttctg gctgcccaga gcagaggaag ccgggctggc
 2040
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 2100
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 2160
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 2267

<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

Val	Pro	Val	Leu	His	Lys	His	Pro	Cys	His	Leu	Val	Thr	Ser	Pro	Pro
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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
		35					40				45				
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50					55				60					
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65				70					75					80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90						95	
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
		100					105						110		
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
		115					120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

130		135		140	
Phe His Tyr Ala Val Asp	Asn Leu Gly Ala Asp	Ala Ile Ala Thr Gly			
145	150	155	160		
His Tyr Ala Arg Thr Ser	Leu Glu Asp Glu Glu Val	Phe Glu Gln Lys			
	165	170	175		
His Val Lys Lys Pro Glu	Gly Leu Phe Arg Asn Arg	Phe Glu Val Arg			
	180	185	190		
Asn Ala Val Lys Leu Leu	Gln Ala Ala Asp Ser	Phe Lys Asp Gln Thr			
	195	200	205		
Phe Phe Leu Ser Gln Val	Ser Gln Asp Ala Leu Arg	Arg Thr Ile Phe			
	210	215	220		
Pro Leu Gly Gly Leu Thr	Lys Glu Phe Val Lys Lys	Ile Ala Ala Glu			
225	230	235	240		
Asn Arg Leu His His Val	Leu Gln Lys Lys Glu Ser	Met Gly Met Cys			
	245	250	255		
Phe Ile Gly Lys Arg Asn	Phe Glu His Phe Leu Leu	Gln Tyr Leu Gln			
	260	265	270		
Pro Arg Pro Gly His Phe	Ile Ser Ile Glu Asp Asn	Lys Val Leu Gly			
	275	280	285		
Thr His Lys Gly Trp Phe	Leu Tyr Thr Leu Gly Gln	Arg Ala Asn Ile			
	290	295	300		
Gly Gly Leu Arg Glu Pro	Trp Tyr Val Val Glu Lys	Asp Ser Val Lys			
305	310	315	320		
Gly Asp Val Phe Val Ala	Pro Arg Thr Asp His	Pro Ala Leu Tyr Arg			
	325	330	335		
Asp Leu Leu Arg Thr Ser	Arg Val His Trp Ile	Ala Glu Glu Pro Pro			
	340	345	350		
Ala Ala Leu Val Arg Asp	Lys Met Met Glu Cys	His Phe Arg Phe Arg			
	355	360	365		
His Gln Met Ala Leu Val	Pro Cys Val Leu Thr	Leu Asn Gln Asp Gly			
	370	375	380		
Thr Val Trp Val Thr Ala	Val Gln Ala Val Arg	Ala Leu Ala Thr Gly			
385	390	395	400		
Gln Phe Ala Val Phe Tyr	Lys Gly Asp Glu Cys	Leu Gly Ser Gly Lys			
	405	410	415		
Ile Leu Arg Leu Gly Pro	Ser Ala Tyr Thr Leu	Gln Lys Gly Gln Arg			
	420	425	430		
Arg Ala Gly Met Ala Thr	Glu Ser Pro Ser Asp	Ser Pro Glu Asp Gly			
	435	440	445		
Pro Gly Leu Ser Pro Leu	Leu				
450	455				

<210> 5721

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5721

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cttatgttag ctatgggata tcatgagaag ggcagagctt tcctgaaaag aaaagaatat

120

ggaatagcct tgccatgtct gttggacgct gacaaatatt tctggtgggc gcttttgtac

180

ttggtgaaca ccagctttaa ggaagatggc ccagactata cagaacacct gccatgccct
 240
 tgagactgca gactttcatc tacaacagtg gttaatgtaa aagagtagtt atgggtgtaa
 300
 ctggtgaatt tcttcttccc tttgtatttc taattgacct ttcctccctg taaagaaaag
 360
 aattttcaag caggtaggat atgctctctt tttctgtaca
 400

<210> 5722
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 5722
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 Glu Arg Lys Ala Leu Met Leu Ala Met Gly Tyr His Glu Lys Gly Arg
 20 25 30
 Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu Pro Cys Leu Leu
 35 40 45
 Asp Ala Asp Lys Tyr Phe Trp Trp Ala Leu Leu Tyr Leu Val Asn Thr
 50 55 60
 Ser Phe Lys Glu Asp Gly Pro Asp Tyr Thr Glu His Leu Pro Cys Pro
 65 70 75 80

<210> 5723
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 5723
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 aagaatgtgg agagttttct agaagcctgt cgaaaaatgg gggtagcctga ggtatggggg
 120
 ctgctttcta aagagtgggt gcatgccgga ctcagcggag ccatgtggca tggatgggtg
 180
 gcttccattt gcagcggatg tctgctctca gatgaaggca caggctgccc ctgectgccc
 240
 cagcatgccc cctgccctgc atgccccctg cctgcatgt cacctgtcct acacatcccc
 300
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 360
 ctctctctgc acgctg
 376

<210> 5724
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 5724
 Xaa Thr Thr Phe Ser Ser Phe His Pro Pro Gln Pro Lys Leu Ser Ala

1	5	10	15
Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu Glu Ala Cys Arg Lys			
20	25	30	
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
35	40	45	
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
50	55	60	
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
85	90	95	
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
100	105	110	
Val Leu His Met Pro Cys Pro Ala Leu Leu His Ala			
115	120	125	

<210> 5725

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 5725

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120
accgcgcacg ggcgagcatg gggggcaagc agagcacggc gacccgctcc cgggggcccc
180
ttcccggggg tctccaccga tgacagcgcc gtgccgccgc cgggaggggc gccccatttc
240
gggcactacc ggacgggagg cggggccatg gggctgcgca gcgcatcggc cagctcgggtg
300
gcaggcatgg gcatggaccc cagcacggcc ggggggggtg cctttggcct ctacaccccc
360
gcctcccggg gcaccggcga ctccgagagg gcgcccggcg gcggagggtc tgcgtccgac
420
tccacctatg cccatggcaa tggttaccag gagacgggcg gcggtcacca tagagacggg
480
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540
agggtggttc gctcgcatag tggtttcaag tgccccattt gctccaagtc tgtggcttct
600
gacgagatgg aaatgcactt tataatgtgt ttgagcaaac ctgcctctc ctacaacgat
660
gatgtgctga ctaaagacgc gggtgagtgt gtgatctgcc tggaggagct gctgcagggg
720
gacacgatag ccaggctgcc ctgcctgtgc atctatcaca aaagctgcat agactcgtgg
780
tttgaagtga acagatcttg tccggaacac cctgcggact gacctcggg cttgcttgct
840
gactcctctc aaaggacag agcggccctg ctccaggagg gaggctcacc ggaccctggg
900
gcagagctga gcttgggaca ccagcgggaa cagggcaccc cttctgcact gacttcaga
960

tcattggttct cccttctctcc ctgaggacac caaattggat gagagcaagt ttgagagaag
 1020
 aatgaatcaa ctgctatcct tcccttcacc cctcagccca ggagggaaag ggcattttct
 1080
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 1140
 aaaaaaagtc tagtgtcgac
 1160

<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

Ala	Phe	Phe	Pro		Phe	Leu	Pro	Pro	Arg	Leu	Leu	Phe	Asp	Ser	Leu	Pro
1				5					10					15		
Leu	Tyr	Ala	Arg	Pro	Ala	Leu	Pro	Leu	Leu	Leu	Arg	Ser	Gly	Gly	Gly	
		20					25						30			
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly	
		35				40					45					
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val	
	50				55				60							
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe	
65				70					75					80		
Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser	
			85					90					95			
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly	
			100					105					110			
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser	
		115				120						125				
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala	
	130					135					140					
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly	
145					150					155				160		
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu	
			165					170					175			
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro	
		180						185					190			
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile	
		195						200					205			
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr	
	210					215					220					
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly	
225					230					235				240		
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys	
			245					250					255			
Ile	Asp	Ser	Trp	Phe	Glu	Val	Asn	Arg	Ser	Cys	Pro	Glu	His	Pro	Ala	
			260					265					270			

Asp

<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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120
gagatcctaa ggaccttgag ccccgaggag ctagagcagc tggactgcga actacaggag
180
atggatcctg agaacatgct cctgccagct ggactaagac aacgtgacca gacaaagaag
240
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300
gaagtcaaag agcgtgatga cttggtgccc ttcacaggcg agaagaagg gaaaccctat
360
attcagccca agagggaaat cccagcagag gagcagatca ccctggagcc tgagctggag
420
gaggcactgg cacatgccac agatgctgaa atgtgtgaca ttgcagcaat tctggacatg
480
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540
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600
ccaaatccca caaacattga ggagatacta aagagggtcc gaagcaatga caaggagctg
660
gaggaggtga acttgaataa tatacaggac atccaatac ccattgctaag tgagctgtgt
720
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780
gaccccatg ccaatgcagt ggctgacatg ttgcgtgaga atcgtagcct ccagagccta
840
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900
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960
gtggagatgg agatggccac cgtgctagag cagtgtccct ctattgtccg ctttggctac
1020
cactttacac agcagggggc acgagctcgg gcagcccagg ccattgacccg aaacaatgaa
1080
ctacgtcgcc agcaaaagaa gagataacac tgcatttccc ttaccaact agcgtgtgga
1140
gcactggaca cttaaatcct catctgtcct cctttcctgt aaataaaagc ccttctatcc
1200
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa
1237

<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

Xaa Arg Arg Glu Val Thr Thr Arg Thr Gly Ser Val Ser Thr Thr Gln

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Trp Glu Gly Val Gly Ala Thr Met Ser Ser Tyr Gln Lys Glu Leu Glu
      20           25           30
Lys Tyr Arg Asp Ile Asp Glu Asp Glu Ile Leu Arg Thr Leu Ser Pro
      35           40           45
Glu Glu Leu Glu Gln Leu Asp Cys Glu Leu Gln Glu Met Asp Pro Glu
      50           55           60
Asn Met Leu Leu Pro Ala Gly Leu Arg Gln Arg Asp Gln Thr Lys Lys
      65           70           75           80
Ser Pro Thr Gly Pro Leu Asp Arg Glu Ala Leu Leu Gln Tyr Leu Glu
      85           90           95
Gln Gln Ala Leu Glu Val Lys Glu Arg Asp Asp Leu Val Pro Phe Thr
      100          105          110
Gly Glu Lys Lys Gly Lys Pro Tyr Ile Gln Pro Lys Arg Glu Ile Pro
      115          120          125
Ala Glu Glu Gln Ile Thr Leu Glu Pro Glu Leu Glu Glu Ala Leu Ala
      130          135          140
His Ala Thr Asp Ala Glu Met Cys Asp Ile Ala Ala Ile Leu Asp Met
      145          150          155          160
Tyr Thr Leu Met Ser Asn Lys Gln Tyr Tyr Asp Ala Leu Cys Ser Gly
      165          170          175
Glu Ile Cys Asn Thr Glu Gly Ile Ser Ser Val Val Gln Pro Asp Lys
      180          185          190
Tyr Lys Pro Val Pro Asp Glu Pro Pro Asn Pro Thr Asn Ile Glu Glu
      195          200          205
Ile Leu Lys Arg Val Arg Ser Asn Asp Lys Glu Leu Glu Glu Val Asn
      210          215          220
Leu Asn Asn Ile Gln Asp Ile Pro Ile Pro Met Leu Ser Glu Leu Cys
      225          230          235          240
Glu Ala Met Lys Ala Asn Thr Tyr Val Arg Ser Phe Ser Leu Val Ala
      245          250          255
Thr Arg Ser Gly Asp Pro Ile Ala Asn Ala Val Ala Asp Met Leu Arg
      260          265          270
Glu Asn Arg Ser Leu Gln Ser Leu Asn Ile Glu Ser Asn Phe Ile Ser
      275          280          285
Ser Thr Gly Leu Met Ala Val Leu Lys Ala Val Arg Glu Asn Ala Thr
      290          295          300
Leu Thr Glu Leu Arg Val Asp Asn Gln Arg Gln Trp Pro Gly Asp Ala
      305          310          315          320
Val Glu Met Glu Met Ala Thr Val Leu Glu Gln Cys Pro Ser Ile Val
      325          330          335
Arg Phe Gly Tyr His Phe Thr Gln Gln Gly Pro Arg Ala Arg Ala Ala
      340          345          350
Gln Ala Met Thr Arg Asn Asn Glu Leu Arg Arg Gln Gln Lys Lys Arg
      355          360          365

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<210> 5729

<211> 381

<212> DNA

<213> Homo sapiens

<400> 5729

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 120
 cagccagatg cgccctcaggt cttctctgaa cttgatctgc aagacgcaga gagagggacc
 180
 gccaaagtaat tcgtggcaaa gaaacgtgtt ctcagcactt tgcctccca gggccaagca
 240
 gggggccact cacctgcttg cgtctcaggc gtccctcctg gaccttcctc cgcaggaacc
 300
 gcgtcttctt caccagcttc cggtaactgt ggtgggtcat cttccgccgg cggatcttca
 360
 gcacgttttt gcactaaatt t
 381

<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

Phe	Val	Ala	Lys	Lys	Arg	Val	Leu	Ser	Thr	Leu	Pro	Ser	Gln	Gly	Gln
1			5						10				15		
Ala	Gly	Gly	His	Ser	Pro	Ala	Cys	Val	Ser	Gly	Val	Pro	Pro	Gly	Pro
			20				25				30				
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
		35				40				45					
Gly	Ser	Ser	Ser	Ala	Gly	Gly	Ser	Ser	Ala	Arg	Phe	Cys	Thr	Lys	Phe
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<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 120
 attttgtcag cacttgggaa cttcctggcc cagatgattg agaagaagcg gaaaaaagaa
 180
 aactctagaa gtctggatgt cggtagggcct ctgagatatg ccgtttacgg gttcttcttc
 240
 acagggccgc tgagtcactt cttctacttc ttcattggaac attggatccc tcctgaggtc
 300
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 360
 atgttgttct tcctcatcat gaactttctg gaggggaaag acgcctcagc cttcgcgcc
 420
 aagatgaggg ggggcttctg gccggcgctg aggatgaact ggcgggtgtg gacgccacta
 480
 cagttcatca acatcaacta cgtccctctg aagttccggg tgctcttcgc caacctggca
 540
 gctctgttct ggtatgccta cctggcctcc ttggggaagt gacgaccgct gggagaacat
 600

caggtgcact gtggacgtgg gtctgggggt ctcacccgcc cagcgagagc agaaccaatc
 660
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 720
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 780
 ggtggtgctg ccccgaaaac ttaaaattta gtcgaggcag tttcaattgt tactgtggac
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 891

<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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Arg	Arg	Ala	Leu	Ala	Gln	Tyr	Leu	Leu	Phe	Leu	Arg	Leu	Tyr	Pro	Val
		20					25					30			
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
	35					40					45				
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
	50				55		60								
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65					70			75					80		
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
		85					90					95			
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
	100						105					110			
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
	115					120					125				
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
	130					135					140				
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145				150				155						160	
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
		165				170							175		
Ala	Asn	Leu	Ala	Ala	Leu	Phe	Trp	Tyr	Ala	Tyr	Leu	Ala	Ser	Leu	Gly
		180					185						190		

Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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 120

gtcagctata ctttcctctt ctggctgccc ctgtacatca cgaatgtgga tcaccttgat
 180
 gccaaaaagg cggggtgcac aggtagcccc gacctctca ggcattccag ccacagaaca
 240
 tcaaagttag cgagtactgc gctggctgtg gcttcagaga acctgtatgt gccacgtgga
 300
 aaaacaggac accagagccc accagacagt gccggccagc agagaagcag agagccagcg
 360
 ccacacaaca tcaagaaggc cgacaaccag gttggaaacc aagacggagc tcagaccac
 420
 cacatcgccc cagaggcttt tccagacccc atgatgttcc ggactgacct aaaaactaat
 480
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 540
 ccagccacag agcgccccga agtcaccgtc atcccagccc ctggccttcc tgccgcctc
 600
 cgggggccatg gcgctgctgt tcagctcagg cacaggggca cagcagaggt ttgggaagcg
 660
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 720
 cacacaccac acctgggact gtttttaata catagcaaca gactgggtta tttatttaag
 780
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 840
 caaaactcaa ttgttctctg gctgtttttt tcagttgtgt ctagcaaaat acttatctgc
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 950

<210> 5734
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 5734
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<210> 5735
 <211> 4241
 <212> DNA
 <213> Homo sapiens
 <400> 5735

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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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			20					25					30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
			35				40					45			
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
			50			55					60				
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
			65			70				75				80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
			85					90					95		
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

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      100      105      110
Glu Tyr Ile His Asn Phe Lys Leu Leu Gln Ala Ser Phe Lys Arg Met
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Asn Val Asp Lys Val Ile Pro Val Glu Lys Leu Val Lys Gly Arg Phe
      130      135      140
Gln Asp Asn Leu Asp Phe Ile Gln Trp Phe Lys Lys Phe Tyr Asp Ala
      145      150      155      160
Asn Tyr Asp Gly Lys Glu Tyr Asp Pro Val Glu Ala Arg Gln Gly Gln
      165      170      175
Asp Ala Ile Pro Pro Pro Asp Pro Gly Glu Gln Ile Phe Asn Leu Pro
      180      185      190
Lys Lys Ser His His Ala Asn Ser Pro Thr Ala Gly Ala Ala Lys Ser
      195      200      205
Ser Pro Ala Ala Lys Pro Gly Ser Thr Pro Ser Arg Pro Ser Ser Ala
      210      215      220
Lys Arg Ala Ser Ser Ser Gly Ser Ala Ser Lys Ser Asp Lys Asp Leu
      225      230      235      240
Glu Thr Gln Val Ile Gln Leu Asn Glu Gln Val His Ser Leu Lys Leu
      245      250      255
Ala Leu Glu Gly Val Glu Lys Glu Arg Asp Phe Tyr Phe Gly Lys Leu
      260      265      270
Arg Glu Ile Glu Leu Leu Cys Gln Glu His Gly Gln Glu Asn Asp Asp
      275      280      285
Leu Val Gln Arg Leu Met Asp Ile Leu Tyr Ala Ser Glu Glu His Glu
      290      295      300
Gly His Thr Glu Glu Pro Glu Ala Glu Glu Gln Ala His Glu Gln Gln
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Pro Pro Gln Gln Glu Glu Tyr
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<210> 5737

<211> 340

<212> DNA

<213> Homo sapiens

<400> 5737

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240
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<210> 5738

<211> 99

<212> PRT

<213> Homo sapiens

<400> 5738

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Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu
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Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
 20           25           30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
 35           40           45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
 50           55           60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
 65           70           75           80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
 85           90           95
Gly Gly Xaa

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<210> 5739

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5739

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<210> 5740

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5740

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Met Ile Arg Lys Gln Ser Gln His His Gly Pro Ser Leu Ser Met Ser
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Ser Lys Pro Cys Gln Ala Leu Gln Leu Leu Ser Thr Leu Pro Ser Gly
      20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
      35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
      50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro
      85           90           95
Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
      100          105          110
Phe Leu Gly Arg Ala Gln Pro Gln
      115          120

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<210> 5741

<211> 2444

<212> DNA

<213> Homo sapiens

<400> 5741

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<210> 5742

<211> 427
 <212> PRT
 <213> Homo sapiens

<400> 5742

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 20           25           30
Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala Arg
 35           40           45
Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe
 50           55           60
Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys
 65           70           75           80
Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
 85           90           95
Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
100           105           110
Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
115           120           125
Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
130           135           140
Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr
145           150           155           160
Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
165           170           175
Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
180           185           190
Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu
195           200           205
Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
210           215           220
Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
225           230           235           240
Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu
245           250           255
Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys
260           265           270
Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala
275           280           285
Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp
290           295           300
Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
305           310           315           320
Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
325           330           335
Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
340           345           350
Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
355           360           365
Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
370           375           380
Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

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Lys Val His Arg Asp Pro Pro Pro Asp Lys Ser
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<210> 5743
<211> 550
<212> DNA
<213> Homo sapiens
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<400> 5743
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<210> 5744
<211> 95
<212> PRT
<213> Homo sapiens
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<400> 5744																
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Pro	Cys	Glu	Gly	Glu	Arg	Pro	Pro	Tyr	Leu	Gly	Arg	Pro	Ala	Met	Cys	
			20					25					30			
Cys	Lys	Gly	Ala	Arg	Arg	Pro	Gly	Cys	Pro	Thr	Pro	Glu	Thr	Gly	Gln	
		35					40					45				
Gly	Gly	Arg	Pro	Pro	Lys	Gly	Pro	Arg	Thr	Gly	Arg	Pro	Ala	Pro	Ser	
	50					55					60					
Pro	Gly	Ser	Pro	Pro	Arg	Glu	Ser	Arg	Cys	Leu	Ala	Pro	Xaa	Asp	Pro	
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Leu	Gly	Trp	Thr	Pro	Gly	Pro	Pro	Ala	Ala	Ala	Pro	Gly	Ala	Leu		
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<210> 5745
<211> 849

<212> DNA

<213> Homo sapiens

<400> 5745

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 120
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<210> 5746

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5746

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Val	Thr	Gln	Lys	Leu	Met	Leu	Arg	Lys	Ala	Ser	Leu	Gly	Pro	Leu	Pro
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Arg	Ala	Ser	Glu	Arg	Pro	Gly	Val	Pro	Val	Phe	Leu	Glu	Met	Gly	Pro
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Ser	Ala	Ala	Gly	Cys	Glu	Ala	Leu	Arg	Ser	Ile	Thr	Gly	Arg	Ala	Trp
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Arg	Trp	Trp	Pro	Pro	Gly	Thr	Thr	Leu	Ser	Cys	Leu	Phe	Thr	Phe	His
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Tyr	Gln	Val	Phe	Ser	Gly	His	Tyr	Asp	Leu	Phe	Pro	Tyr	Asn	Ser	Asp

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Leu	Cys	Ile	Leu	Leu	Trp	Pro	Ala	Val	Ser	Ala	Gly	Gly	Ser	Gln	Arg
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<210> 5747

<211> 1999

<212> DNA

<213> Homo sapiens

<400> 5747

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<211> 492

<212> PRT

<213> Homo sapiens

<400> 5748

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Glu	Asp	Glu	Glu	Glu	Gly	Ala	Glu	Thr	Arg	Gly	Ala	Gly	Asp	Pro	Ala
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			50					55					60		
Arg	Gly	His	Ser	Gly	Thr	Thr	Ala	Ser	Gly	Gly	Glu	Asn	Glu	Arg	Glu
			65					70					75		80
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			85						90					95	
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			100						105				110		
Asp	Ala	Phe	Leu	Leu	Lys	His	Val	Arg	Arg	Asn	Lys	Leu	Gly	Tyr	Val
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Ser	Val	Lys	Leu	Leu	Thr	Ser	Phe	Lys	Lys	Val	Lys	His	Leu	Thr	Arg
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Pro Pro Asp Ile Arg Arg Ile Ser Ser Arg Tyr Ser Gln Val Gly Thr
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Gln Glu Cys Ala Ile Val Glu Phe Glu Glu Val Glu Ala Ala Ile Lys
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Lys Asn His Asp Glu Glu Pro Thr Ala Ser Ile His Leu Asn Lys Ser
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Leu Asn Lys Arg Val Glu Glu Leu Gln Tyr Met Gly Asp Glu Ser Ser
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Glu Glu Gly Arg Leu Asn Cys Ser Thr Ser Pro Glu Ile Phe Arg Lys
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Cys Met Asp Tyr Ser Ser Asp Ser Ser Val Thr Pro Ser Gly Ser Pro
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Trp Val Arg Arg Arg Arg Gln Ala Glu Met Gly Thr Gln Glu Lys Ser
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Pro Gly Thr Ser Pro Leu Leu Ser Arg Lys Met Gln Thr Ala Asp Gly
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<210> 5749

<211> 2849

<212> DNA

<213> Homo sapiens

<400> 5749

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<211> 522

<212> PRT

<213> Homo sapiens

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Val	Gly	Pro	Gly	Ala	Ser	Gly	Val	Cys	Pro	Thr	Ala	Cys	Ile	Cys	Ala
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 Asp Tyr Thr Cys Arg Leu Trp Ser Asp Ser Arg His Ser Arg Gln Val
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<212> PRT

<213> Homo sapiens

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<210> 5766
 <211> 873
 <212> PRT
 <213> Homo sapiens

<400> 5766
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 35 40 45
 Met Asp Leu Arg Ser Asp Asp Gln Asp Leu Thr Arg Met Ile His Ile
 50 55 60
 Leu Asp Thr Glu His Pro Trp Asp Leu His Ser Ile Pro Ser Glu His
 65 70 75 80
 His Glu Ala Ile Thr Cys Leu Glu Trp Asp Gln Ser Gly Ser Arg Leu
 85 90 95
 Leu Ser Ala Asp Ala Asp Gly Gln Ile Lys Cys Trp Ser Met Ala Asp
 100 105 110
 His Leu Ala Asn Ser Trp Glu Ser Ser Val Gly Ser Leu Val Glu Gly
 115 120 125
 Asp Pro Ile Val Ala Leu Ser Trp Leu His Asn Gly Val Lys Leu Ala
 130 135 140
 Leu His Val Glu Lys Ser Gly Ala Ser Ser Phe Gly Glu Lys Phe Ser
 145 150 155 160
 Arg Val Lys Phe Ser Pro Ser Leu Thr Leu Phe Gly Gly Lys Pro Met
 165 170 175
 Glu Gly Trp Ile Ala Val Thr Val Ser Gly Leu Val Thr Val Ser Leu
 180 185 190
 Leu Lys Pro Ser Gly Gln Val Leu Thr Ser Thr Glu Ser Leu Cys Arg
 195 200 205
 Leu Arg Gly Arg Val Ala Leu Ala Asp Ile Ala Phe Thr Gly Gly Gly
 210 215 220
 Asn Ile Val Val Ala Thr Ala Asp Gly Ser Ser Ala Ser Pro Val Gln
 225 230 235 240
 Phe Tyr Lys Val Cys Val Ser Val Val Ser Glu Lys Cys Arg Ile Asp
 245 250 255
 Thr Glu Ile Leu Pro Ser Leu Phe Met Arg Cys Thr Thr Asp Leu Asn
 260 265 270
 Arg Lys Asp Lys Phe Pro Ala Ile Thr His Leu Lys Phe Leu Ala Arg
 275 280 285
 Asp Met Ser Glu Gln Val Leu Leu Cys Ala Ser Ser Gln Thr Ser Ser
 290 295 300
 Ile Val Glu Cys Trp Ser Leu Arg Lys Glu Gly Leu Pro Val Asn Asn
 305 310 315 320
 Ile Phe Gln Gln Ile Ser Pro Val Val Gly Asp Lys Gln Pro Thr Ile
 325 330 335
 Leu Lys Trp Arg Ile Leu Ser Ala Thr Asn Asp Leu Asp Arg Val Ser


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      340      345      350
Ala Val Ala Leu Pro Lys Leu Pro Ile Ser Leu Thr Asn Thr Asp Leu
355      360      365
Lys Val Ala Ser Asp Thr Gln Phe Tyr Pro Gly Leu Gly Leu Ala Leu
370      375      380
Ala Phe His Asp Gly Ser Val His Ile Val His Arg Leu Ser Leu Gln
385      390      395      400
Thr Met Ala Val Phe Tyr Ser Ser Ala Ala Pro Arg Pro Val Asp Glu
405      410      415
Pro Ala Met Lys Arg Pro Arg Thr Ala Gly Pro Ala Val His Leu Lys
420      425      430
Ala Met Gln Leu Ser Trp Thr Ser Leu Ala Leu Val Gly Ile Asp Ser
435      440      445
His Gly Lys Leu Ser Val Leu Arg Leu Ser Pro Ser Met Gly His Pro
450      455      460
Leu Glu Val Gly Leu Ala Leu Arg His Leu Leu Phe Leu Leu Glu Tyr
465      470      475      480
Cys Met Val Thr Gly Tyr Asp Trp Trp Asp Ile Leu Leu His Val Gln
485      490      495
Pro Ser Met Val Gln Ser Leu Val Glu Lys Leu His Glu Glu Tyr Thr
500      505      510
Arg Gln Thr Ala Ala Leu Gln Gln Val Leu Ser Thr Arg Ile Leu Ala
515      520      525
Met Lys Ala Ser Leu Cys Lys Leu Ser Pro Cys Thr Val Thr Arg Val
530      535      540
Cys Asp Tyr His Thr Lys Leu Phe Leu Ile Ala Ile Ser Ser Thr Leu
545      550      555      560
Lys Ser Leu Leu Arg Pro His Phe Leu Asn Thr Pro Asp Lys Ser Pro
565      570      575
Gly Asp Arg Leu Thr Glu Ile Cys Thr Lys Ile Thr Asp Val Asp Ile
580      585      590
Asp Lys Val Met Ile Asn Leu Lys Thr Glu Glu Phe Val Leu Asp Met
595      600      605
Thr His Cys Arg Arg Cys Ser Ser Ser Cys Ser Gly Trp Ala Thr Ser
610      615      620
Cys Cys Thr Cys Trp Pro Ala Tyr Pro Thr Ser Pro Ala Pro Pro Arg
625      630      635      640
Ser Pro Ala Pro Pro Arg Ser Pro Pro Pro Pro Arg Ser Pro Pro Pro
645      650      655
Pro Arg Ser Pro Pro Leu His Glu Ala Ser Ala Gly Ser Leu Leu Arg
660      665      670
Pro Gly His Ser Phe Leu Arg Asp Gly Thr Ser Leu Gly Met Leu Arg
675      680      685
Glu Leu Met Val Val Ile Arg Ile Trp Gly Leu Leu Lys Pro Ser Cys
690      695      700
Leu Pro Val Tyr Thr Ala Thr Ser Asp Thr Gln Asp Ser Met Ser Leu
705      710      715      720
Leu Phe Arg Leu Leu Thr Lys Leu Trp Ile Cys Cys Arg Asp Glu Gly
725      730      735
Pro Ala Ser Glu Pro Asp Glu Ala Leu Val Asp Glu Cys Cys Leu Leu
740      745      750
Pro Ser Gln Leu Leu Ile Pro Ser Leu Asp Trp Leu Pro Ala Ser Asp
755      760      765
Gly Leu Val Ser Arg Leu Gln Pro Lys Gln Pro Leu Arg Leu Gln Phe

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770	775	780
Gly Arg Ala Pro Thr Leu Pro Gly Ser Ala Ala Thr Leu Gln Leu Asp		
785	790	795
Gly Leu Ala Arg Ala Pro Gly Gln Pro Lys Ile Asp His Leu Arg Arg		800
	805	810
Leu His Leu Gly Ala Cys Pro Thr Glu Glu Cys Lys Ala Cys Thr Arg		815
	820	825
Cys Gly Cys Val Thr Met Leu Lys Ser Pro Asn Arg Thr Thr Ala Val		830
	835	840
Lys Gln Trp Glu Gln Arg Trp Ile Lys Asn Cys Leu Cys Gly Gly Leu		845
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Trp Trp Arg Val Pro Leu Ser Tyr Pro		860
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<210> 5767

<211> 1910

<212> DNA

<213> Homo sapiens

<400> 5767

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240
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300
gtgtgtgtgt gtgtgtgtgt gtgtgaataa tatatggaat aaagtttgag attccctgct
360
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420
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480
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540
ctagaaaaga ctgtgaaaat atatatctca aaagagaaca aggcatagtc agaaggctca
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gtaaaacaat tactttaaaa gctgactaat aaaaagggtg agtgaaagaa ctcttccatc
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720
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960
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1020

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 1800
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<210> 5768

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5768

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 20 25 30
 Thr Cys Glu Asn Trp Arg Glu Ile His His Leu Val Phe His Val Ala
 35 40 45
 Asn Ile Cys Phe Ala Val Gly Leu Val Ile Pro Thr Thr Leu His Leu
 50 55 60
 His Met Ile Phe Leu Arg Gly Met Leu Thr Leu Gly Cys Thr Leu Tyr
 65 70 75 80
 Ile Val Trp Ala Thr Leu Tyr Arg Cys Ala Leu Asp Ile Met Ile Trp
 85 90 95
 Asn Ser Val Phe Leu Gly Val Asn Ile Leu His Leu Ser Tyr Leu Leu
 100 105 110
 Tyr Lys Lys Arg Pro Val Lys Ile Glu Lys Glu Leu Ser Gly Met Tyr
 115 120 125
 Arg Arg Leu Phe Glu Pro Leu Arg Val Pro Pro Asp Leu Phe Arg Arg

130		135		140	
Leu Thr Gly Gln Phe Cys Met Ile Gln Thr Leu Lys Lys Gly Gln Thr					
145		150		155	160
Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Asp Arg Leu Ser Ile Leu					
	165		170		175
Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn					
	180		185		190
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln					
	195		200		205
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn					
	210		215		220
Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu					
225		230		235	240
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp					
	245		250		255
Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys					
	260		265		270
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser					
	275		280		285
Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp					
	290		295		300
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His					
305		310		315	320
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu					
	325		330		335
Glu Gly Ala Glu Asp Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn					
	340		345		350
Thr Leu Lys Val His Gln Leu Pro					
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<210> 5769

<211> 427

<212> DNA

<213> Homo sapiens

<400> 5769

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120

ctgcagacac agctgaagga agtattaaga gaaaatgatc tcttgcggaa ggatgtggaa
180

gtaaaggaga gcaaattgag ttcttcaatg aatagcatca agatcttctg gggcccagag
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300

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427

<210> 5770

<211> 85
 <212> PRT
 <213> Homo sapiens

<400> 5770
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 Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg
 35 40 45
 Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val
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 Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp
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 Leu Asn Ser Cys Ile
 85

<210> 5771
 <211> 2539
 <212> DNA
 <213> Homo sapiens

<400> 5771
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 480
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<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

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Val Arg Cys Ala Thr Pro Pro Gln Leu Ala Asn Gly Val Thr Glu Gly
 35           40           45
Leu Asp Tyr Gly Phe Met Lys Glu Val Thr Phe His Cys His Gly Leu
 50           55           60
His Leu Ala Arg Cys Ser Lys Thr His Leu Ser Val Arg Gly Asn Trp
 65           70           75           80
Asp Ala Glu Ile Pro Leu Cys Lys Pro Val Asn Cys Gly Pro Pro Glu
 85           90           95
Asp Leu Ala His Gly Phe Pro Asn Gly Phe Ser Phe Ile His Gly Gly
100          105          110
His Ile Gln Tyr Gln Cys Phe Pro Gly Tyr Lys Leu His Gly Asn Ser
115          120          125
Ser Arg Arg Cys Leu Ser Asn Gly Ser Trp Ser Gly Ser Ser Pro Ser
130          135          140
Cys Leu Pro Cys Arg Cys Ser Thr Pro Val Ile Glu Tyr Gly Thr Val
145          150          155          160
Asn Gly Thr Asp Phe Asp Cys Gly Lys Ala Ala Arg Ile Gln Cys Phe
165          170          175
Lys Gly Phe Lys Leu Leu Gly Leu Ser Glu Ile Thr Cys Glu Ala Asp
180          185          190
Gly Gln Trp Ser Ser Gly Phe Pro His Cys Glu His Thr Ser Cys Gly
195          200          205
Ser Leu Pro Met Ile Pro Asn Ala Phe Ile Ser Glu Thr Ser Ser Trp
210          215          220
Lys Glu Asn Val Ile Thr Tyr Ser Cys Arg Ser Gly Tyr Val Ile Gln
225          230          235          240
Gly Ser Ser Asp Leu Ile Cys Thr Glu Lys Gly Val Trp Asn Gln Pro
245          250          255
Tyr Pro Val Cys Glu Pro Leu Ser Cys Gly Ser Pro Pro Ser Val Ala
260          265          270
Asn Ala Val Ala Thr Gly Glu Ala His Thr Tyr Glu Ser Glu Val Lys
275          280          285
Leu Arg Cys Leu Glu Gly Tyr Thr Met Asp Thr Asp Thr Ile
290          295          300
Thr Cys Gln Lys Asp Gly Arg Trp Phe Pro Glu Arg Ile Ser Cys Ser
305          310          315          320
Pro Lys Lys Cys Pro Leu Pro Glu Asn Ile Thr His Ile Leu Val His
325          330          335
Gly Asp Asp Phe Ser Val Asn Arg Gln Val Ser Val Ser Cys Ala Glu
340          345          350
Gly Tyr Thr Phe Glu Gly Val Asn Ile Ser Val Cys Gln Leu Asp Gly

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370              375              380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr
385              390              395              400
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu
      405              410              415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly
      420              425              430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe
      435              440              445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val
      450              455              460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala
      465              470              475              480
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys
      485              490              495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu
      500              505              510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg
      515              520              525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp
      530              535              540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly
      545              550              555              560
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln
      565              570              575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu
      580              585              590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro
      595              600              605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His
      610              615              620
Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala
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Pro Leu

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<210> 5773

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5773

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240
gtgtcccggc gcgagcggga ccgggagcgc cctcgtcccc gcccgaccgc atcgacatct
300

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tcgggcgccac ggtgagcaag cgcagcagcc tggacgagaa gcagaagcga gagggaggag
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<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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			20				25					30			
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35					40				45				
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
	50					55					60				
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65				70				75						80	
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
			85					90						95	
Ala	Ser	Thr	Ser	Ser	Gly	Ala	Arg								
			100												

<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 1441

<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

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Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
		20					25					30			
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
	35					40				45					
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
	50				55			60							
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65			70					75					80		
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
		85					90					95			
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

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 Pro Glu Gly Ala Pro Glu Arg Ala Ala Glu Leu Gly Val Asn Phe Gly
 115 120 125
 Arg Ser Arg Gln Gly Ser Ala Arg Gly Thr Lys Pro His Arg Cys Glu
 130 135 140
 Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Lys His Gln
 145 150 155 160
 Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys
 165 170 175
 Cys Phe Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser
 180 185 190
 Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg
 195 200 205
 Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro
 210 215 220
 Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu
 225 230 235 240
 Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser
 245 250 255
 Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn
 260 265 270
 Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys
 275 280 285
 Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg
 290 295 300
 Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg
 305 310 315 320
 Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys
 325 330 335
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 Thr Pro Pro Pro Ala Pro Thr
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<210> 5777

<211> 1431

<212> DNA

<213> Homo sapiens

<400> 5777

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 120
 tgcgtgcggc ctgctcaag caaccaggta cgtaggtcgg cggcccagct cggcgctcgg
 180
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 240
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 300
 gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgctgcccg
 360
 gatcaccgac tggcccttgt aagcaccttc gcagcaggaa gccagagct gcgcctgccc
 420

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 480
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 600
 gccaacatct tccaggacgc cgagctgctg cagatccaag ccctgtttca acgcagcggg
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 gaccagctgg ccgaggaacg ggcacagatc atctgggaat gtgcagggga ccaccgtgtg
 720
 gctgaggccc tcaagaggct gcgcaggaag agggccccc aaaggagaaacc ccctggggcca
 780
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 960
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<210> 5778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 5778

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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
		20					25				30				
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
		35				40					45				
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
	50					55					60				
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65					70					75				80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85						90					95	
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

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      100      105      110
Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln
      115      120      125
Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala
      130      135      140
Val Pro Gly Arg Lys Arg Ser Leu Ala Pro Glu Gln Pro Ile Leu Gly
      145      150      155      160
Pro Ser Gln Val

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<210> 5779
 <211> 371
 <212> DNA
 <213> Homo sapiens

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<400> 5779
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gcacacggga atgtgtgctg gtgtgtgtgc gtgcatgcag ctgtgtgtgg atgtgcantc
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240
acagggtgggt gtgtgtatgt gtgtgggggt gtgcccattc gtgcagggtgt gtgggtgtgc
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371

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<210> 5780
 <211> 123
 <212> PRT
 <213> Homo sapiens

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<400> 5780
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Gln Arg His Gly Arg Glu Arg Gly Val Ile Ser Ala Leu Ser Gly Ile
      20      25      30
Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys
      35      40      45
Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys
      50      55      60
Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys
65      70      75      80
Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly
      85      90      95
Val Trp Val Cys Arg Val Xaa Cys Leu Cys Val Gly Val Xaa Pro Cys
      100      105      110
Val Pro Leu Trp Arg Cys Val Gly Val Cys Ser
      115      120

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<210> 5781
 <211> 845
 <212> DNA
 <213> Homo sapiens

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 240
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 360
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 480
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 720
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 845

<210> 5782
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 5782
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 Ser Arg Pro Arg Gly Ala Gly Val Arg Cys His Phe Cys Gly Val Asn
 20 25 30
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
 35 40 45
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro
 50 55 60
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
 65 70 75 80
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

	85		90		95										
Gly	Gln	Ala	Pro	Ala	Pro	Pro	Ala	Pro	Gly	Gln	Ala	Gly	Ser	His	Arg
	100		105		110										
Pro	Gly	Ala	Ala	Pro	Ser	Pro	Arg	Cys	Ser	Ser	Gly	Asn	His	Arg	Ser
	115		120		125										
Ser	Leu	Ala	Val	Ala	Trp	Arg	His	Gly	Thr	Trp	Ile	Gly	Gln	Pro	Pro
	130		135		140										
Pro	Cys	Pro													
145															

<210> 5783
 <211> 1839
 <212> DNA
 <213> Homo sapiens

<400> 5783
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 180
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 240
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 480
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 720
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 840
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<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

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Leu	Val	Ile	Gln	Gln	Arg	Gly	Val	Arg	Ile	Tyr	Asp	Gly	Glu	Glu	Lys
		20						25					30		
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile	
		35					40					45			
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
		50				55					60				
Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
		65				70				75				80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
			85						90					95	
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
			100					105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120					125			
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
		130					135					140			
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
		145				150				155				160	
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
			165					170					175		
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

180 185 190
 Glu Leu Ser Lys Ser Ile Ala Asn Lys Ile Lys Asp Lys Gln Gly Asp
 195 200 205
 Ile Thr Glu Asp Glu Thr Ile Arg Phe Lys Ser Tyr Leu Leu Ser Met
 210 215 220
 Gly Ile Ala Asn Pro Val Thr Arg Glu Thr Tyr Gly Ser Gly Thr Gln
 225 230 235 240
 Tyr His Met Gln Leu Ala Lys Gln Leu Ala Gly Ile Leu Gln Val Pro
 245 250 255
 Leu Glu Glu Arg Gly Gly Ile Met Ser Leu Thr Glu Val Tyr Cys Leu
 260 265 270
 Val Asn Arg Ala Arg Gly Met Glu Leu Leu Ser Pro Glu Asp Leu Val
 275 280 285
 Asn Ala Cys Lys Met Leu Glu Ala Leu Lys Leu Pro Leu Arg Leu Arg
 290 295 300
 Val Phe Asp Ser Gly Val Met Val Ile Glu Leu Gln Ser His Lys Glu
 305 310 315 320
 Glu Glu Met Val Ala Ser Ala Leu Glu Thr Val Ser Glu Lys Gly Ser
 325 330 335
 Leu Thr Ser Glu Glu Phe Ala Lys Leu Val Gly Met Ser Val Leu Leu
 340 345 350
 Ala Lys Glu Arg Leu Leu Leu Ala Glu Lys Met Gly His Leu Cys Arg
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 Gln Ser
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<210> 5785

<211> 785

<212> DNA

<213> Homo sapiens

<400> 5785

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 785

<210> 5786
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 5786
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 Lys Pro Ala Ala Arg Ala Ala Asp Leu Ala Ala Pro Ala Gly Ala Ala
 35 40 45
 Leu Ala Gln Pro Leu Gly Pro Trp Pro Leu Ser Ser Ala Gly Pro Arg
 50 55 60
 Leu Val Phe Asn Arg Val Asn Arg Arg Asp Pro Ser Lys Ser Pro
 65 70 75 80
 Ser Leu Gln Gly Thr Gln Glu Thr Tyr Thr Leu Ala His Lys Glu Asn
 85 90 95
 Val Arg Phe Val Ser Glu Ala Trp Gln Gln Val Gln Gln Leu Asp
 100 105 110
 Gly Gly Pro Ala Gly Glu Gly Gly Pro Arg Pro Val Gln Tyr Val Glu
 115 120 125
 Arg Thr Pro Asn Pro Arg Leu Gln Asn Phe Val Pro Ile Asp Leu Asp
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<210> 5787
 <211> 1683
 <212> DNA
 <213> Homo sapiens

<400> 5787
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Thr	Ala	Phe	Ile	Gly	Ser	Asn	Ile	Val	Thr	Ser	Gln	Thr	Ile	Trp	Glu
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Gly	Leu	Trp	Met	Asn	Cys	Val	Val	Gln	Ser	Thr	Gly	Gln	Met	Gln	Cys
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Lys	Val	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Pro	Gln	Asp	Leu	Gln	Ala	Ala
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Arg	Ala	Leu	Val	Ile	Ser	Ile	Ile	Val	Ala	Ala	Leu	Gly	Val	Leu	
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Leu	Ser	Val	Val	Gly	Gly	Lys	Cys	Thr	Asn	Cys	Leu	Glu	Asp	Glu	Ser
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Ala	Lys	Ala	Lys	Thr	Met	Ile	Val	Ala	Gly	Val	Val	Phe	Leu	Leu	Ala
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Gln	Asp	Phe	Tyr	Asn	Pro	Leu	Val	Ala	Ser	Gly	Gln	Lys	Arg	Glu	Met
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Gly	Ala	Ser	Leu	Tyr	Val	Gly	Trp	Ala	Ala	Ser	Gly	Leu	Leu	Leu	Leu
		165						170					175		
Gly	Gly	Gly	Leu	Leu	Cys	Cys	Asn	Cys	Pro	Pro	Arg	Thr	Asp	Lys	Pro
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<210> 5795

<211> 993

<212> DNA

<213> Homo sapiens

<400> 5795

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<210> 5796

<211> 200

<212> PRT

<213> Homo sapiens

<400> 5796

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				20				25					30		
Tyr	Leu	Arg	Lys	Glu	Met	Thr	Gln	Asn	Ile	Tyr	Gln	Met	Ala	Thr	Phe
				35				40				45			
Gly	Thr	Thr	Ala	Gly	Phe	Ser	Gly	Ile	Phe	Ser	Asn	Phe	Leu	Phe	Arg
				50			55				60				
Arg	Cys	Phe	Lys	Val	Lys	His	Asp	Ala	Leu	Lys	Thr	Tyr	Ala	Ser	Leu
						70				75				80	
Ala	Thr	Leu	Pro	Phe	Leu	Ser	Thr	Val	Val	Thr	Asp	Lys	Leu	Phe	Val
					85				90				95		
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	100		105		110										
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Leu	Ala	Phe	Thr	Lys	Asn	Gly	Arg	Leu	Ala	Thr	Lys	Tyr	His	Thr	Val
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Pro	Leu	Pro	Pro	Lys	Gly	Arg	Val	Leu	Ile	His	Trp	Met	Thr	Leu	Cys
	145				150				155					160	
Gln	Thr	Gln	Met	Lys	Leu	Met	Ala	Ile	Pro	Leu	Val	Phe	Gln	Ile	Met
			165					170					175		
Phe	Gly	Ile	Leu	Asn	Gly	Leu	Tyr	His	Tyr	Ala	Val	Phe	Glu	Glu	Thr
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<210> 5797

<211> 405

<212> DNA

<213> Homo sapiens

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<211> 109

<212> PRT

<213> Homo sapiens

<400> 5798

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		20					25				30				
Arg	Arg	Val	Glu	Gly	Ser	Arg	Asp	Gln	Ala	Trp	Pro	Leu	Gln	Thr	Phe
		35				40					45				
Ser	Gln	Arg	Asn	Tyr	Arg	Ser	Leu	Ser	Leu	Tyr	Cys	Trp	Leu	Ala	Arg
	50				55					60					
Glu	Gly	Arg	Thr	Ser	Ser	Tyr	Gln	Gly	Asn	Gln	Gly	Ser	Leu	Arg	Pro
	65				70				75				80		
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100

105

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<212> DNA
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4962

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<210> 5800

<211> 535

<212> PRT

<213> Homo sapiens

<400> 5800

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Glu Val Glu Arg Gly Ser Gly Thr Glu Glu Ala Asn Glu Asp Met Glu				
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 <212> DNA
 <213> Homo sapiens

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<211> 350

<212> PRT

<213> Homo sapiens

<400> 5802

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      180          185          190
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<211> 692

<212> DNA

<213> Homo sapiens

<400> 5803

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120

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<210> 5804

<211> 126

<212> PRT

<213> Homo sapiens

<400> 5804

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			20					25					30		
Gln	Thr	Val	Lys	Glu	Phe	Ile	Val	Phe	Leu	Lys	Gln	Asp	Val	Pro	Leu
		35					40					45			
Arg	Thr	Asn	Leu	Pro	Pro	Pro	Phe	Arg	Asn	Tyr	Lys	Tyr	Asp	Ala	Leu
	50					55					60				
Lys	Ile	Ile	His	Gln	Ala	His	Lys	Ser	Lys	Thr	Asn	Glu	Leu	Val	Leu
65				70						75				80	
Ser	Leu	Glu	Asp	Asp	Glu	Arg	Leu	Leu	Leu	Lys	Glu	Asp	Ser	Thr	Leu
			85						90					95	
Lys	Ala	Ala	Gly	Ile	Ala	Ser	Glu	Thr	Glu	Ile	Ala	Phe	Phe	Cys	Glu
			100					105						110	
Glu	Asp	Tyr	Arg	Asn	Tyr	Lys	Ala	Asn	Pro	Ile	Ser	Ser	Trp		
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<211> 1112

<212> DNA

<213> Homo sapiens

<400> 5805

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<210> 5806

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5806

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			20					25					30		
Leu	Ser	Pro	Arg	Lys	Asp	Gly	Leu	Ser	Tyr	Gln	Ile	Phe	Pro	Asp	Pro
			35				40					45			
Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
	50					55					60				
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65					70					75				80	
Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
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100

105

<210> 5807

<211> 1429

<212> DNA

<213> Homo sapiens

<400> 5807

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<210> 5808

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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Leu Leu Gly Gly Ile Pro Glu Ser Gly Gly Pro Asp Ala Arg Gln Gly
35 40 45
Trp Leu Ala Ala Leu Gln Asp Arg Ser Ile Leu Ala Pro Leu Ala Trp
50 55 60
Asp Leu Gly Leu Leu Leu Leu Phe Val Gly Gln His Ser Leu Met Ala
65 70 75 80
Ala Glu Arg Val Lys Ala Trp Thr Ser Arg Tyr Phe Gly Val Leu Gln
85 90 95
Arg Ser Leu Tyr Val Ala Cys Thr Ala Leu Ala Leu Gln Leu Val Met
100 105 110
Arg Tyr Trp Glu Pro Ile Pro Lys Gly Pro Val Leu Trp Glu Ala Arg
115 120 125
Ala Glu Pro Trp Ala Thr Trp Val Pro Leu Leu Cys Phe Val Leu His
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Val Ile Ser Trp Leu Leu Ile Phe Ser Ile Leu Leu Val Phe Asp Tyr
145 150 155 160
Ala Glu Leu Met Gly Leu Lys Gln Val Tyr Tyr His Val Leu Gly Leu
165 170 175
Gly Glu Pro Leu Ala Leu Lys Ser Pro Arg Ala Leu Arg Leu Phe Ser
180 185 190
His Leu Arg His Pro Val Cys Val Glu Leu Leu Thr Val Leu Trp Val
195 200 205
Val Pro Thr Leu Gly Thr Asp Arg Leu Leu Leu Ala Phe Leu Leu Thr
210 215 220
Leu Tyr Leu Gly Leu Ala His Gly Leu Asp Gln Gln Asp Leu Arg Tyr
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Leu Arg Ala Gln Leu Gln Arg Lys Leu His Leu Leu Ser Arg Pro Gln
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Asp Gly Glu Ala Glu
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<211> 2009

<212> DNA

<213> Homo sapiens

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<210> 5810

<211> 52

<212> PRT

<213> Homo sapiens

<400> 5810

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		20					25					30			
Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	His	Tyr	Lys
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<210> 5811

<211> 1607

<212> DNA

<213> Homo sapiens

<400> 5811

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<210> 5812

<211> 463

<212> PRT

<213> Homo sapiens

<400> 5812

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			20						25				30		
Thr	Pro	Gln	Ala	Ile	Glu	Pro	Gln	Ala	Ile	Val	Gln	Gln	Val	Pro	Ala
			35						40				45		
Pro	Ser	Arg	Met	Gln	Met	Pro	Gln	Gly	Asn	Pro	Leu	Leu	Leu	Ser	His
			50						55				60		
Thr	Leu	Gln	Glu	Leu	Leu	Ala	Arg	Asp	Thr	Val	Gln	Val	Glu	Leu	Ile
			65						70				75		80
Pro	Glu	Lys	Lys	Gly	Leu	Phe	Leu	Lys	His	Val	Glu	Tyr	Glu	Val	Ser
			85						90				95		
Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
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Val	Phe	Gln	Glu	Met	Leu	Leu	His	Lys	Phe	Pro	Tyr	Arg	Met	Val	Pro

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Gly Ser Asp Val Gln Asn Lys Leu Lys Glu Ser Ala Gln Cys Val Gly
      180      185      190
Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu
      195      200      205
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      260      265      270
Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly
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      290      295      300
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Leu His Lys His Gln Arg Ala Leu His Lys Tyr Ser Leu Met Lys Arg
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      370      375      380
Glu Leu Arg Asn Tyr Phe Ser Leu Tyr Cys Leu His Gln Glu Thr Gln
      385      390      395      400
Leu Ile His Val Tyr Leu Pro Leu Thr Ser His Ile Leu Arg Ala Phe
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Val Asn Ser Gln Ile Gln Gly His Lys Glu Met Ser Lys Val Trp Asn
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<210> 5813
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 <213> Homo sapiens

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 2160
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 2280
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 2340
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 2400
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 2460
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 2520
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 2640
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 2700
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 2760
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 2820
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 2880
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 2991

<210> 5814

<211> 149

<212> PRT

<213> Homo sapiens

<400> 5814

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Tyr	His	Pro	Asp	Lys	His	Arg	Asp	Pro	Glu	Leu	Lys	Ser	Gln	Ala	Glu
				20				25					30		
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro

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      35          40          45
Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met
  50          55          60
Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg
  65          70          75          80
Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln
      85          90          95
Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
  100          105          110
Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
  115          120          125
Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro
  130          135          140
Val Ser His Glu His
145

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<210> 5815
 <211> 590
 <212> DNA
 <213> Homo sapiens

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<400> 5815
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  120
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  180
agtctcttta gttttgggct tgtagatgat gcccaccatc tcatcaatgc cctccgacag
  240
cagagtataa cccttcatct tgttgatgtc atgccggtcc tcatcacgct ttcttcgctt
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  360
gccctccagc ttcccaacaa gggacagcac ctctctgtg ggttcatccc ggcgggtccg
  420
gtcaatgaga gaacggtcag cttggagcac aagattcgag ttgcgcttgt actcgattg
  480
cagactacgg gcggttacat ccgccatggc cgcggctgct cggaggcttc agaccaccac
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gcctccatac cgcaagctgc aaacggccgc agatctctgc tcctggcgcc
  590

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<210> 5816
 <211> 196
 <212> PRT
 <213> Homo sapiens

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<400> 5816
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  1          5          10          15
Ala Ala Asp Glu Val Leu Ala Val Leu Lys Asn Glu Lys Leu Arg Asp
      20          25          30
Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

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      35          40          45
Thr Arg Tyr His Val Leu Val Asn Leu Gly Leu Pro Ser Leu Phe Ser
  50          55          60
Phe Gly Leu Val Asp Asp Ala His His Leu Ile Asn Ala Leu Arg Gln
  65          70          75          80
Gln Ser Ile Thr Leu His Leu Val Asp Val Met Pro Val Leu Ile Thr
      85          90          95
Leu Ser Ser Leu Gly Ser Ser Phe Leu Leu His Leu Arg Phe Gly Pro
      100          105          110
Leu Ser Leu Val Ser His Thr Gly Ala Leu Gln Leu Pro Asn Lys Gly
      115          120          125
Gln His Leu Ser Cys Gly Phe Ile Pro Ala Gly Pro Val Asn Glu Arg
      130          135          140
Thr Val Ser Leu Glu His Lys Ile Arg Val Arg Leu Val Leu Val Leu
      145          150          155          160
Gln Thr Thr Gly Gly Tyr Ile Arg His Gly Arg Gly Cys Ser Glu Ala
      165          170          175
Ser Asp His His Ala Ser Ile Pro Gln Ala Ala Asn Gly Arg Arg Ser
      180          185          190
Leu Leu Leu Ala
      195

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<210> 5817

<211> 648

<212> DNA

<213> Homo sapiens

<400> 5817

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  120
cctagtaggc agtgctcctg ggacaagtct gagtcacccc agagaagcag catgaacaat
  180
ggatccccc cagctctatc aggcagcaaa accaacagcc caaagaacag tgttcacaag
  240
ctagatgtgt ctagaagccc ccctctcatg gtcaaaaaga acccagcctt taataagggt
  300
agtgggatag ttaccaatgg gtccttcagc agcagtaatg cagaaggctt tgagaaaacc
  360
caaaccaccc ccaatgggag cctacaggcc agaaggagct cttcactgaa ggtatctggt
  420
accaaaatgg gcacgcacag tgtacagaat ggaacggtgc gcatgggcat tttgaacagc
  480
gacacactcg ggaacccccc aaatgttcga aacatgagct ggctgccaaa tggctatgtg
  540
accctgaggg ataacaagca gaaagaacaa gctggagagt taggccagca caacagactg
  600
tcacctatga taatgtccat cacagttctc catgatgaac ttgatgac
  648

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<210> 5818

<211> 191

<212> PRT

<213> Homo sapiens

<400> 5818

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Met Gly Gln Leu Gln Asn Lys Glu Asn Asn Asn Thr Lys Asp Ser Pro
 1          5          10          15
Ser Arg Gln Cys Ser Trp Asp Lys Ser Glu Ser Pro Gln Arg Ser Ser
 20          25          30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
 35          40          45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
 50          55          60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
 65          70          75          80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
 85          90          95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
100          105          110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
115          120          125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
130          135          140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145          150          155          160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
165          170          175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
180          185          190

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<210> 5819

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 5819

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120
cgctctgcct tgcagctctt ctggaccgag gagcccaaag ccctaccctc accattcacc
180
aggtcctgtg ggaagagcag cgtggaggtg ggctgaggtt agaaggtgca gacgtggaa
240
gaagattgtg agctgagtat tggacatctg ttcttgaata gtccttgggc ctgccatagg
300
aaaggaagtt ctccagggtt acagttctta tccgcgtgaa tacacatggc tctgttacga
360
aaaattaatc aggtgctgct gttccttctg atcgtgaccc tctgtgtgat tctgtataag
420
aaagttcata aggggactgt gcccaagaat gacgcagatg atgaatccga gactcctgaa
480
gaactggaag aagagattcc tgtggtgatt tgtgctgcag caggaggat gggtgccact
540
atggctgcca tcaatagcat ctacagcaac cctgacgcca acatcttggt ctatgtagtg
600

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ggactccgga atactctgac tcgaatacga aaatggattg aacattccaa actgagagaa
 660
 ataaacttta aaatcgtgga attcaaccg atggctctca aagggaagat cagaccagac
 720
 tcactcgaggc ctgaattgct ccagcctctg aactttgttc gattttatct ccctctactt
 780
 atccaccaac acgagaaagt catctatttg gacgatgatg taattgtaca aggtgatatc
 840
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 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1260
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 1320
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 1620
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 1652

<210> 5820

<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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Val	Thr	Leu	Cys	Val	Ile	Leu	Tyr	Lys	Lys	Val	His	Lys	Gly	Thr	Val
		20						25					30		
Pro	Lys	Asn	Asp	Ala	Asp	Asp	Glu	Ser	Glu	Thr	Pro	Glu	Glu	Leu	Glu
		35					40					45			
Glu	Glu	Ile	Pro	Val	Val	Ile	Cys	Ala	Ala	Ala	Gly	Arg	Met	Gly	Ala
		50				55					60				
Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	Pro	Asp	Ala	Asn	Ile
		65			70				75				80		
Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	Leu	Thr	Arg	Ile	Arg	Lys

[illegible]

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<210> 5821
<211> 3292
<212> DNA
<213> Homo sapiens
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<400> 5821
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120
taaaaaggaa aaaatataac ttagagcccc ctatgaaaaa ctaaattagc atcatgacag
180
gatacacttt ggggagtgaa atttcacagt acctttattt aattccaagc catagagcct
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420
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600
gaagaccctc ggagccaggg cgtggaaaga ttcatacagg agtcaaaatt aaaaaataac
660

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780
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<210> 5822

<211> 712

<212> PRT

<213> Homo sapiens

<400> 5822

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 His Lys Glu Arg Cys Ile Ala Ala Ser Leu Glu Leu Asn Asn Pro Val
 35 40 45
 Pro Glu Gln Pro Pro Leu Pro Thr Ser Glu Ser Pro Phe Ala Trp Ser
 50 55 60
 Pro Leu Ala Gly Glu Lys Phe Val Glu Val Tyr Lys Glu Ala His Leu
 65 70 75 80
 Leu Ala Leu His Ile Glu Ser Ser Ser Arg Asn Gln Ala Ala Gln Ala
 85 90 95
 Ala Lys Pro Glu Asp Pro Arg Ser Gln Gly Val Glu Arg Phe Ile Gln

				100						105					110			
Glu	Ser	Lys	Leu	Lys	Ile	Asn	Leu	Phe	Glu	Lys	Glu	Lys	Glu	Met	Lys			
		115					120					125						
Lys	Ser	Pro	Thr	Ser	Leu	Lys	Arg	Glu	Thr	Tyr	Tyr	Leu	Ser	Asp	Ser			
	130					135					140							
Pro	Leu	Leu	Gly	Pro	Pro	Val	Gly	Glu	Pro	Arg	Leu	Leu	Ala	Ser	Ser			
145					150					155					160			
Pro	Ala	Leu	Pro	Ser	Ser	Gly	Ala	Gln	Ala	Arg	Leu	Thr	Arg	Ala	Pro			
				165					170					175				
Gly	Pro	Pro	His	Ser	Ala	His	Ala	Leu	Pro	Arg	Glu	Ser	Cys	Thr	Ala			
		180						185					190					
His	Ala	Ala	Ser	Gln	Ala	Ala	Thr	Gln	Arg	Lys	Pro	Gly	Thr	Lys	Leu			
	195					200					205							
Leu	Leu	Pro	Arg	Ala	Ala	Ser	Val	Arg	Gly	Arg	Ser	Ile	Pro	Gly	Ala			
	210					215					220							
Ala	Glu	Lys	Pro	Lys	Lys	Glu	Ile	Pro	Ala	Ser	Pro	Ser	Arg	Thr	Lys			
225					230					235					240			
Ile	Pro	Ala	Glu	Lys	Glu	Ser	His	Arg	Asp	Val	Leu	Pro	Asp	Lys	Pro			
				245					250					255				
Ala	Pro	Gly	Ala	Val	Asn	Val	Pro	Ala	Ala	Gly	Ser	His	Leu	Gly	Gln			
		260						265					270					
Gly	Lys	Arg	Ala	Ile	Pro	Val	Pro	Asn	Lys	Leu	Gly	Leu	Lys	Lys	Thr			
	275					280						285						
Leu	Leu	Lys	Ala	Pro	Gly	Ser	Thr	Ser	Asn	Leu	Ala	Arg	Lys	Ser	Ser			
	290				295					300								
Ser	Gly	Pro	Val	Trp	Ser	Gly	Ala	Ser	Ser	Ala	Cys	Thr	Ser	Pro	Ala			
305				310						315					320			
Val	Gly	Lys	Ala	Lys	Ser	Ser	Glu	Phe	Ala	Ser	Ile	Pro	Ala	Asn	Ser			
				325					330					335				
Ser	Arg	Pro	Leu	Ser	Asn	Ile	Ser	Lys	Ser	Gly	Arg	Met	Gly	Pro	Ala			
		340						345					350					
Met	Leu	Arg	Pro	Ala	Leu	Pro	Ala	Gly	Pro	Val	Gly	Ala	Ser	Ser	Trp			
	355					360						365						
Gln	Ala	Lys	Arg	Val	Asp	Val	Ser	Glu	Leu	Ala	Ala	Glu	Gln	Leu	Thr			
	370				375						380							
Ala	Pro	Pro	Ser	Ala	Ser	Pro	Thr	Gln	Pro	Gln	Thr	Pro	Glu	Gly	Gly			
385					390					395					400			
Gly	Gln	Trp	Leu	Asn	Ser	Ser	Cys	Ala	Trp	Ser	Glu	Ser	Ser	Gln	Leu			
				405					410					415				
Asn	Lys	Thr	Arg															

530		535		540
Ser Ala Met Arg Thr Glu Pro Thr Arg Glu Ser Asn Arg Lys Thr Asp				
545	550	555	560	
Ser Arg Leu Val Asp Val Ser Pro Asp Arg Gly Ser Pro Pro Ser Arg				
	565	570	575	
Val Pro Gln Ala Leu Asn Phe Ser Pro Glu Glu Ser Asp Ser Thr Phe				
	580	585	590	
Ser Lys Ser Thr Ala Thr Glu Val Ala Arg Glu Glu Ala Lys Pro Gly				
	595	600	605	
Gly Asp Ala Ala Pro Ser Glu Ala Leu Leu Val Asp Ile Lys Leu Glu				
	610	615	620	
Pro Leu Ala Val Thr Pro Asp Ala Ala Ser Gln Pro Leu Ile Asp Leu				
	625	630	635	640
Pro Leu Ile Asp Phe Cys Asp Thr Pro Glu Ala His Val Ala Val Gly				
	645	650	655	
Ser Glu Ser Arg Pro Leu Ile Asp Leu Met Thr Asn Thr Pro Asp Met				
	660	665	670	
Asn Lys Asn Val Ala Lys Pro Ser Pro Val Val Gly Gln Leu Ile Asp				
	675	680	685	
Leu Ser Ser Pro Leu Ile Gln Leu Ser Pro Glu Ala Asp Lys Glu Asn				
	690	695	700	
Val Asp Ser Pro Leu Leu Lys Phe				
705	710			

<210> 5823

<211> 2585

<212> DNA

<213> Homo sapiens

<400> 5823

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180
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240
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300
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Thr Pro Ala Cys Asn Thr Ser Leu Pro Ala Gln Arg Trp Lys Trp Val
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Pro Thr Pro Pro Asp Arg Trp Ala Asn Val Lys Val Glu Cys Glu Pro
370              375              380
Ser Trp Gln Pro Phe Gln Gly His Cys Tyr Arg Leu Gln Ala Glu Lys
385              390              395              400
Arg Ser Trp Gln Glu Ser Lys Lys Ala Cys Leu Arg Gly Gly Gly Asp
405              410              415
Leu Val Ser Ile His Ser Met Ala Glu Leu Glu Phe Ile Thr Lys Gln
420              425              430
Ile Lys Gln Glu Val Glu Glu Leu Trp Ile Gly Leu Asn Asp Leu Lys
435              440              445
Leu Gln Met Asn Phe Glu Trp Ser Asp Gly Ser Leu Val Ser Phe Thr
450              455              460
His Trp His Pro Phe Glu Pro Asn Asn Phe Arg Asp Ser Leu Glu Asp
465              470              475              480
Cys Val Thr Ile Trp Gly Pro Glu Gly Arg Trp Asn Asp Ser Pro Cys
485              490              495
Asn Gln Ser Leu Pro Ser Ile Cys Lys Lys Ala Gly Gln Leu Ser Gln
500              505              510
Gly Ala Ala Glu Glu Asp His Gly Cys Arg Lys Gly Trp Thr Trp His
515              520              525
Ser Pro Ser Cys Tyr Trp Leu Gly Glu Asp Gln Val Thr Tyr Ser Glu
530              535              540
Ala Arg Arg Leu Cys Thr Asp His Gly Ser Gln Leu Val Thr Ile Thr
545              550              555              560
Asn Arg Phe Glu Gln Ala Phe Val Ser Ser Leu Ile Tyr Asn Trp Glu
565              570              575
Gly Glu Tyr Phe Trp Thr Ala Leu Gln Asp Leu Asn Ser Thr Gly Ser
580              585              590
Phe Phe Trp Leu Ser Gly Asp Glu Val Met Tyr Thr His Trp Asn Arg
595              600              605
Asp Gln Pro Gly Tyr Ser Arg Gly Gly Cys Val Ala Leu Ala Thr Gly
610              615              620
Ser Ala Met Gly Leu Trp Glu Val Lys Asn Cys Thr Ser Phe Arg Ala
625              630              635              640
Arg Tyr Ile Cys Arg Gln Ser Leu Gly Thr Pro Val Thr Pro Glu Leu
645              650              655
Pro Gly Pro Asp Pro Thr Pro Ser Leu Thr Gly Ser Cys Pro Gln Gly
660              665              670
Trp Ala Ser Asp Thr Lys Leu Arg Tyr Cys Tyr Lys Val Phe Ser Ser
675              680              685
Glu Arg Leu Gln Asp Lys Lys Ser Trp Val Gln Ala Gln Gly Ala Cys
690              695              700
Gln Glu Leu Gly Ala Gln Leu Leu Ser Leu Ala Ser Tyr Glu Glu Glu
705              710              715              720
His Phe Val Ala Asn Met Leu Asn Lys Ile Phe Gly Glu Ser Glu Pro
725              730              735
Glu Ile His Glu Gln His Trp Phe Trp Ile Gly Leu Asn Arg Arg Asp
740              745              750
Pro Arg Gly Gly Gln Ser Trp Arg Trp Ser Asp Gly Val Gly Phe Ser
755              760              765
Tyr His Asn Phe Asp Arg Ser Arg His Asp Asp Asp Ile Arg Gly
770              775              780
Cys Ala Val Leu Asp Leu Ala Ser Leu Gln Trp Val Ala Met Gln Cys

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785          790          795          800
Asp Thr Gln Leu Asp Trp Ile Cys Lys Ile Pro Arg Gly Thr Asp Val
805          810          815
Arg Glu Pro Asp Asp Ser Pro Gln Gly Arg Arg Glu Trp Leu Arg Phe
820          825          830
Gln Glu Ala Glu Tyr Lys Phe Phe Glu His His Ser Thr Trp Ala Gln
835          840          845
Ala Gln Arg Ile Cys Thr Trp Phe Gln Ala Glu Leu Thr Ser Val His
850          855          860
Ser Gln Ala Glu Leu Asp Phe Leu Ser His Asn Leu Gln Lys Phe Ser
865          870          875          880
Arg Ala Gln Glu Gln His Trp Trp Ile Gly Leu His Thr Ser Glu Ser
885          890          895
Asp Gly Arg Phe Arg Trp Thr Asp Gly Ser Ile Ile Asn Phe Ile Ser
900          905          910
Trp Ala Pro Gly Lys Pro Arg Pro Val Gly Lys Asp Lys Lys Cys Val
915          920          925
Tyr Met Thr Ala Ser Arg Glu Asp Trp Gly Asp Gln Arg Cys Leu Thr
930          935          940
Ala Leu Pro Tyr Ile Cys Lys Arg Ser Asn Val Thr Lys Glu Thr Gln
945          950          955          960
Pro Pro Asp Leu Pro Thr Thr Ala Leu Gly Gly Cys Pro Ser Asp Trp
965          970          975
Ile Gln Phe Leu Asn Lys Cys Phe Gln Val Gln Gly Gln Glu Pro Gln
980          985          990
Ser Arg Val Lys Trp Ser Glu Ala Gln Phe Ser Cys Glu Gln Gln Glu
995          1000          1005
Ala Gln Leu Val Thr Ile Thr Asn Pro Leu Glu Gln Ala Phe Ile Thr
1010          1015          1020
Ala Ser Leu Pro Asn Val Thr Phe Asp Leu Trp Ile Gly Leu His Ala
1025          1030          1035          1040
Ser Gln Arg Asp Phe Gln Trp Val Glu Gln Glu Pro Leu Met Tyr Ala
1045          1050          1055
Asn Trp Ala Pro Gly Glu Pro Ser Gly Pro Ser Pro Ala Pro Ser Gly
1060          1065          1070
Asn Lys Pro Thr Ser Cys Ala Val Val Leu His Ser Pro Ser Ala His
1075          1080          1085
Phe Thr Gly Arg Trp Asp Asp Arg Ser Cys Thr Glu Thr His Gly
1090          1095          1100
Phe Ile Cys Gln Lys Gly Thr Asp Pro Ser Leu Ser Pro Ser Pro Ala
1105          1110          1115          1120
Ala Leu Pro Pro Ala Pro Gly Thr Glu Leu Ser Tyr Leu Asn Gly Thr
1125          1130          1135
Phe Arg Leu Leu Gln Lys Pro Leu Arg Trp His Asp Ala Leu Leu Leu
1140          1145          1150
Cys Glu Ser His Asn Ala Ser Leu Ala Tyr Val Pro Asp Pro Tyr Thr
1155          1160          1165
Gln Ala Phe Leu Thr Gln Ala Ala Arg Gly Leu Arg Thr Pro Leu Trp
1170          1175          1180
Ile Gly Leu Ala Gly Glu Gly Ser Arg Arg Tyr Ser Trp Val Ser
1185          1190          1195          1200
Glu Glu Pro Leu Asn Tyr Val Gly Trp Gln Asp Gly Glu Pro Gln Gln
1205          1210          1215
Pro Gly Gly Cys Thr Tyr Val Asp Val Asp Gly Ala Trp Arg Thr Thr

```

1220 1225 1230
 Ser Cys Asp Thr Lys Leu Gln Gly Ala Val Cys Gly Val Ser Ser Gly
 1235 1240 1245
 Pro Pro Pro Pro Arg Arg Ile Ser Tyr His Gly Ser Cys Pro Gln Gly
 1250 1255 1260
 Leu Ala Asp Ser Ala Trp Ile Pro Phe Arg Glu His Cys Tyr Ser Phe
 1265 1270 1275 1280
 His Met Glu Leu Leu Leu Gly His Lys Glu Ala Arg Gln Arg Cys Gln
 1285 1290 1295
 Arg Ala Gly Gly Ala Val Leu Ser Ile Leu Asp Glu Met Glu Asn Val
 1300 1305 1310
 Phe Val Trp Glu His Leu Gln Ser Tyr Glu Gly Gln Ser Arg Gly Ala
 1315 1320 1325
 Trp Leu Gly Met Asn Phe Asn Pro Lys Gly Gly Thr Leu Val Trp Gln
 1330 1335 1340
 Asp Asn Thr Ala Val Asn Tyr Ser Asn Trp Gly Pro Pro Gly Leu Gly
 1345 1350 1355 1360
 Pro Ser Met Leu Ser His Asn Ser Cys Tyr Trp Ile Gln Ser Asn Ser
 1365 1370 1375
 Gly Leu Trp Arg Pro Gly Ala Cys Thr Asn Ile Thr Met Gly Val Val
 1380 1385 1390
 Cys Lys Leu Pro Arg Ala Glu Gln Ser Ser Phe Ser Pro Ser Ala Leu
 1395 1400 1405
 Pro Glu Asn Pro Ala Ala Leu Val Val Val Leu Met Ala Val Leu Leu
 1410 1415 1420
 Leu Leu Ala Leu Leu Thr Ala Ala Leu Ile Leu Tyr Arg Arg Arg Gln
 1425 1430 1435 1440
 Ser Ile Glu Arg Gly Ala Phe Glu Gly Ala Arg Tyr Ser Arg Ser Ser
 1445 1450 1455
 Ser Ser Pro Thr Glu Ala Thr Glu Lys Asn Ile Leu Val Ser Asp Met
 1460 1465 1470
 Glu Met Asn Glu Gln Gln Glu
 1475

<210> 5831
 <211> 2216
 <212> DNA
 <213> Homo sapiens

<400> 5831
 nntccccgtt tattcatctt tggttcgtat ttctcgatct tacaagttcg taggtttgag
 60
 aaagaacagg aaaaggtgtc ttctcacaaa taacatgtgc tggagatgac aacttattga
 120
 actcttaagt tctcagcact atgttatgca cttgacgggc attactttaa tcctccactg
 180
 tgagatactt gttattgcct cttttttag acgagaaaaac gggcatagag ggtgagacat
 240
 tggcccaggt tcattccgta agggttggag cctggaattc agatacagga ggaagttaac
 300
 atccctaata ggagggttct gggtactggg gccactgggc ttcttggcag agctgtacac
 360
 aaagaatttc agcagaataa ttggcatgca gttggctgtg gtttcagaag agcaagacca
 420

aaatttgaac aggttaatct gttggattct aatgcagttc atcacatcat tcatgatttt
480
cagcccatg ttatagtaca ttgtgcagca gagagaagac cagatgttgt agaaaatcag
540
ccagatgctg cctctcaact taatgtggat gcttctggga atttagcaaa ggaagcagct
600
gctgttggag catttctcat ctacattagc tcagattatg tatttgatgg aacaaatcca
660
ccttacagag aggaagacat accagctccc cttaaattgt atggcaaac aaaattagat
720
ggagaaaagg ctgtcctgga gaacaatcta ggagctgctg ttttgaggat tcctattctg
780
tatggggaag ttgaaaagct cgaagaaagt gctgtgactg ttatgtttga taaagtgcag
840
ttcagcaaca agtcagcaaa catggatcac tggcagcaga gggtccccc acatgtcaaa
900
gatgtggcca ctgtgtgccg gcagctagca gagaagagaa tgctggatcc atcaattaag
960
ggaaccttct actggtctgg caatgaacag atgactaagt atgaaatggc atgtgcaatt
1020
gcagatgcct tcaacctccc cagcagtcac ttaagacctt ttactgacag ccctgtccta
1080
ggagcacaac gtccgagaaa tgctcagctt gactgctcca aattggagac cttgggcatt
1140
ggccaacgaa caccatttct aattggaatc aaagaatcac tttggccttt cctcattgac
1200
aagagatgga gacaaacggt ctttcattag tttatttgtg ttgggttctt tttttttttt
1260
aaatgaaaaag tatagtatgt ggcaactttt aaagaacaaa ggaaatagtt ttgtatgagt
1320
actttaattg tgactcttag gatctttcag gtaaatgatg ctcttgcaat agtgaaattg
1380
tctaaagaaa ctaaagggca gtcatgccct gtttgagta atttttcttt ttatcatttt
1440
gtttgtcctg gctaaacttg gagtttgagt atagtaaatt atgacctta aatatttgag
1500
agtcaggatg aagcagatct gctgtagact tttcagatga aattgttcat tctcgttaac
1560
tccatatttt caggattttt gaagctgttg accttttcat gttgattatt ttaaattgtg
1620
tgaaatagta taaaaatcat tgggtgttcat tatttgcttt gcctgagctc agatcaaaat
1680
gtttgaagaa aggaacttta tttttgcaag ttacgtacag tttttatgct tgagatattt
1740
caacatgtta tgtatattgg aacttctaca gcttgatgcc tcctgctttt atagcagttt
1800
atggggagca cttgaaagag cgtgtgtaca tgtatttttt ttctaggcaa acattgaatg
1860
caaacgtgta tttttttaat ataaatata aactgtcctt ttcaccccat gttgccgcta
1920
agtgatattt catatgtgtg gttatactca taataatggg ccttgtaagt cttttcacca
1980
ttcatgaata ataataaata tgtactgctg gcatgtaatg cttagttttt ttgtatttac
2040

ttcttttttt aaatgtaagg accaaaacttc taaactaatt gttcttttgt tgctttaatt
 2100
 ttttaaaatt acattcttct gatgtaacat gtgatacata caaaagaata tagtttaata
 2160
 tgtattgaaa taaaacacaa taaaattaac acttgaaaaa aaaaaaaaaa aaaaaa
 2216

<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

Gly Leu Glu Pro Gly Ile Gln Ile Gln Glu Glu Val Asn Ile Pro Asn
 1 5 10 15
 Arg Arg Val Leu Val Thr Gly Ala Thr Gly Leu Leu Gly Arg Ala Val
 20 25 30
 His Lys Glu Phe Gln Gln Asn Asn Trp His Ala Val Gly Cys Gly Phe
 35 40 45
 Arg Arg Ala Arg Pro Lys Phe Glu Gln Val Asn Leu Leu Asp Ser Asn
 50 55 60
 Ala Val His His Ile Ile His Asp Phe Gln Pro His Val Ile Val His
 65 70 75 80
 Cys Ala Ala Glu Arg Arg Pro Asp Val Val Glu Asn Gln Pro Asp Ala
 85 90 95
 Ala Ser Gln Leu Asn Val Asp Ala Ser Gly Asn Leu Ala Lys Glu Ala
 100 105 110
 Ala Ala Val Gly Ala Phe Leu Ile Tyr Ile Ser Ser Asp Tyr Val Phe
 115 120 125
 Asp Gly Thr Asn Pro Pro Tyr Arg Glu Glu Asp Ile Pro Ala Pro Leu
 130 135 140
 Asn Leu Tyr Gly Lys Thr Lys Leu Asp Gly Glu Lys Ala Val Leu Glu
 145 150 155 160
 Asn Asn Leu Gly Ala Ala Val Leu Arg Ile Pro Ile Leu Tyr Gly Glu
 165 170 175
 Val Glu Lys Leu Glu Glu Ser Ala Val Thr Val Met Phe Asp Lys Val
 180 185 190
 Gln Phe Ser Asn Lys Ser Ala Asn Met Asp His Trp Gln Gln Arg Phe
 195 200 205
 Pro Thr His Val Lys Asp Val Ala Thr Val Cys Arg Gln Leu Ala Glu
 210 215 220
 Lys Arg Met Leu Asp Pro Ser Ile Lys Gly Thr Phe His Trp Ser Gly
 225 230 235 240
 Asn Glu Gln Met Thr Lys Tyr Glu Met Ala Cys Ala Ile Ala Asp Ala
 245 250 255
 Phe Asn Leu Pro Ser Ser His Leu Arg Pro Ile Thr Asp Ser Pro Val
 260 265 270
 Leu Gly Ala Gln Arg Pro Arg Asn Ala Gln Leu Asp Cys Ser Lys Leu
 275 280 285
 Glu Thr Leu Gly Ile Gly Gln Arg Thr Pro Phe Arg Ile Gly Ile Lys
 290 295 300
 Glu Ser Leu Trp Pro Phe Leu Ile Asp Lys Arg Trp Arg Gln Thr Val
 305 310 315 320
 Phe His

<210> 5833
 <211> 805
 <212> DNA
 <213> Homo sapiens

<400> 5833
 aagcttgacag cagcacaggg acaggcaccc ttggagccca cccaagatgg gagtgccatt
 60
 gaaacatgtc caaaaggaga cgagccaaga ggtgacgagc aacaggtgga aagtatgacc
 120
 cctaaacctg tgctccagga agaaaacaac caagagtctt ttattgcatt tgctcgggtg
 180
 ttcagtggtg tggctcgaag aggaagaaaa atttttgtct tggggcccaa atacagtctt
 240
 cttgagtttt tacgaagggt accattagge ttctcagctc caccagatgg cctcccccaa
 300
 gtccccca tggcactatg tgctctggaa aacctgtatc ttctgatggg aagggaactg
 360
 gaatatctag aggaggtacc tccaggaaat gtgctaggaa taggaggcct tcaagatttt
 420
 gtgctgaaat ctgcaacact gtgtagcctg ccatcctgce caccatttat accactcaac
 480
 ttcgaagcca ctctattgt gagagttgct gttgaaccaa aacatccaag tgaaatgcct
 540
 cagctcgtaa aaggaatgaa actgttaaac caggctgatc cctgtgtcca gattttaatt
 600
 caggaaacgg gagagcacgt ttagtcaca gcaggagaag tccaccttca gcgatgcctg
 660
 gatgacttaa aagaaggtt tgcaaagatt catatcagtg tatctgaacc tattattcca
 720
 ttcagagaaa caatcacaaa acccccaaaa gttgacatgg tcaatgaaga aataggcaaa
 780
 cagcaaaaag ttgcagtcac acacc
 805

<210> 5834
 <211> 268
 <212> PRT
 <213> Homo sapiens

<400> 5834
 Lys Leu Ala Ala Gln Gly Gln Ala Pro Leu Glu Pro Thr Gln Asp
 1 5 10 15
 Gly Ser Ala Ile Glu Thr Cys Pro Lys Gly Asp Glu Pro Arg Gly Asp
 20 25 30
 Glu Gln Gln Val Glu Ser Met Thr Pro Lys Pro Val Leu Gln Glu Glu
 35 40 45
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
 50 55 60
 Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro
 65 70 75 80
 Leu Glu Phe Leu Arg Arg Val Pro Leu Gly Phe Ser Ala Pro Pro Asp

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      85              90              95
Gly Leu Pro Gln Val Pro His Met Ala Tyr Cys Ala Leu Glu Asn Leu
      100              105              110
Tyr Leu Leu Met Gly Arg Glu Leu Glu Tyr Leu Glu Glu Val Pro Pro
      115              120              125
Gly Asn Val Leu Gly Ile Gly Gly Leu Gln Asp Phe Val Leu Lys Ser
      130              135              140
Ala Thr Leu Cys Ser Leu Pro Ser Cys Pro Pro Phe Ile Pro Leu Asn
      145              150              155              160
Phe Glu Ala Thr Pro Ile Val Arg Val Ala Val Glu Pro Lys His Pro
      165              170              175
Ser Glu Met Pro Gln Leu Val Lys Gly Met Lys Leu Leu Asn Gln Ala
      180              185              190
Asp Pro Cys Val Gln Ile Leu Ile Gln Glu Thr Gly Glu His Val Leu
      195              200              205
Val Thr Ala Gly Glu Val His Leu Gln Arg Cys Leu Asp Asp Leu Lys
      210              215              220
Glu Arg Phe Ala Lys Ile His Ile Ser Val Ser Glu Pro Ile Ile Pro
      225              230              235              240
Phe Arg Glu Thr Ile Thr Lys Pro Pro Lys Val Asp Met Val Asn Glu
      245              250              255
Glu Ile Gly Lys Gln Gln Lys Val Ala Val Ile His
      260              265

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<210> 5835
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<400> 5835
nngctggagc agcgctgggg ttctggcctg gaggagttgt acggcctggc actgcgcttc
60
ttcaaagaaa aagatggcaa agcatttcat ccaacttatg aagaaaaatt gaagcttggtg
120
gcactgcata agcaagttct tatgggccca tataatccag acacttggtcc tgaggttgga
180
ttctttgatg tggtggggaa tgacaggagg agagaatggg cagccctggg aaacatgtct
240
aaagaggatg ccatggtgga gtttgtcaag ctcttaaata ggtgttgcca tctcttttca
300
acatatgttg cgtcccacaa aatagagaag gaagagcaag acaaaaaaag gaaggaggaa
360
gaggagcgaa ggcggcgtga agaggaagaa agagaacgtc tgcaaaagga ggaagagaaa
420

```

<210> 5836
 <211> 140
 <212> PRT
 <213> Homo sapiens

```

<400> 5836
Xaa Leu Glu Gln Arg Trp Gly Phe Gly Leu Glu Glu Leu Tyr Gly Leu
1      5      10      15
Ala Leu Arg Phe Phe Lys Glu Lys Asp Gly Lys Ala Phe His Pro Thr

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      20      25      30
Tyr Glu Glu Lys Leu Lys Leu Val Ala Leu His Lys Gln Val Leu Met
      35      40      45
Gly Pro Tyr Asn Pro Asp Thr Cys Pro Glu Val Gly Phe Phe Asp Val
      50      55      60
Leu Gly Asn Asp Arg Arg Arg Glu Trp Ala Ala Leu Gly Asn Met Ser
      65      70      75      80
Lys Glu Asp Ala Met Val Glu Phe Val Lys Leu Leu Asn Arg Cys Cys
      85      90      95
His Leu Phe Ser Thr Tyr Val Ala Ser His Lys Ile Glu Lys Glu Glu
      100      105      110
Gln Asp Lys Lys Arg Lys Glu Glu Glu Glu Arg Arg Arg Arg Glu Glu
      115      120      125
Glu Glu Arg Glu Arg Leu Gln Lys Glu Glu Glu Lys
      130      135      140

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<210> 5837

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5837

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nnccgtcttt caccatttct accccacgac cacctcggct tggctgtctt ctccatgctg
60
tggtgtttct ggcccgttgg catcgctgcc ttctgtctag cccagaagac caacaaggct
120
tgggccaagg gggcatcca gggggcaggg gccgcctccc gccgtgcctt cctgctgggg
180
gtcctcgccg tcgggctggg cgtgtgcacg tatgcggctg cctcgttgac cctggccgcc
240
taccttgctt cccgagaccc gccctagtgt cccctacagc cctcactgtg aaccctgagg
300
ccggcagccc agcaaattct tgggcagaga gtggagaatc ttggtggatg aggctgcggc
360
ggcggcagga gcatctagaa acgggagcga gctggactgg aacccttccc ctctctggcc
420
accgctcttc gggcggcagc aacctgagat taaacaccag acacccttgg cctgggctca
480
cgaggaaggg gctgcagttc tccaaggatt cccgcctgct cccagatccc cgggagtcgt
540
aggaacccgt tcctggacgc tgacgtcggc ttacagggat cc
582

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<210> 5838

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5838

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Xaa Arg Leu Ser Pro Phe Leu Pro His Asp His Leu Gly Leu Ala Val
1      5      10      15
Phe Ser Met Leu Cys Cys Phe Trp Pro Val Gly Ile Ala Ala Phe Cys
20      25      30
Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

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```

      35          40          45
Ala Gly Ala Ala Ser Arg Arg Ala Phe Leu Leu Gly Val Leu Ala Val
  50          55          60
Gly Leu Gly Val Cys Thr Tyr Ala Ala Ala Leu Val Thr Leu Ala Ala
  65          70          75          80
Tyr Leu Ala Ser Arg Asp Pro Pro
      85

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<210> 5839
 <211> 1895
 <212> DNA
 <213> Homo sapiens

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<400> 5839
tttttttttt ttttaacaata aaatagctct ttgtttatcc actttgattt ggatcattgg
60
aaatattaaa caataaataa aacagagcgg gggctgagga aagcaggatc ttgctgaagt
120
cattcgaatg catcccaacc agtgctcagc tgcgtaacga catggagaga ggcagggggg
180
aatagaaagc aaatttaaaa acaccaacac ccaaacacac aagactgcac acaagaaaaa
240
gtgctcaaga aactttggct ttgaaggga ttcagtgaag ggaagcgatt gtgcaggagg
300
aagggaagaa acccacgac accctaagg gcggggggct ggagggcgag gccctgagac
360
aggctagggg taaagctgac gtccacagc tcaggacgta caaccgatgg cagttttgta
420
ctaggaagaa gctgagtgat gaggctgggt gatgggatcg cttgacgggc tgggagggag
480
gacaggaggt gtaaaggtag ctcacctcc cctaggaaat tcagtgtctt tttggaaga
540
aaaaaatagc ggtaatgcc tgatcctgac aagctgtgag atgctgtctt gcctgtctct
600
gccttttctt ctaagtttct ctccttttct ttgcacaggt gtcaggtagc accccagggg
660
tgcaggagct ggtgttttca tgacaaacaa aaatggggag gttgactcta tctcaaaact
720
agctagccca gtccacaggg caggataatc ctgatggcgt gtagccacat ttgctgcaaa
780
ccagatgtct cggatggata taatgatacc cccggggctc ttctcagggg tgaggacagg
840
tgctgggtcc tgatggtgca tggctgggtg ccagtcactt ttagctgggc agtggcccct
900
cgaggctcgg gcttccctcg acaaggattt tttgatcctt gccagcggag ggagagagag
960
ttatcttggg ttccttttca cttgttttcg ggctgcttca aagcaaacat cccagtcca
1020
aatgttcttt gtggtttgaa tcctggcaga ggccagggtc acatccaagt gggactggcc
1080
tctagcacca ccttctggcc acagcagaga atgggattcc atcaaagcct ctcaaccagc
1140
cgtttcccta aagaatcacc cagatcttaa ctgccctctc caccttcttt tttttccccc
1200

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tcctatttta cattctatatt tctcatatcc agctttttctc tctaagccta accaaatgct
 1260
 ttggtgaatg atgcttgga aagctggagt tttaaaaggc attcatccat ttatgaactt
 1320
 tcttccagcc caggatccct gcagagaacc agaggttaca aatctgccct cttttctccc
 1380
 ctaaaagggtg gctgagggga ggagaggtgc atgtagctcc agctatagca aatcagtgcc
 1440
 ctgactcact ggggagaccc agggggttgg gatgttgctg acacctcatg ggccacctca
 1500
 tcagcccatc ttttagactt caggttcagc tctgggtgct gcaggcaggg acccctctgc
 1560
 tccttgccctg aatgcagggc cagtctccaa ggaactctgt ctgcagagta gaaagagctg
 1620
 tgggctggga atcagggggc tgagggagcc cctgccactg cctgcccaga accagtgtgc
 1680
 ctcattctcc tgctgacagc atgcatgtgc cttttggcta acacacactc ttgtctaatt
 1740
 cccagccacc ttcacccagc ggatgagttc cagttggttt aagccagact ggtgcattta
 1800
 attctggctg caacaactgg attctgttaa gtgcccattg ctaagccaat gagctatctg
 1860
 ctgggctgtg gaaagagaa atgcagtctc ntata
 1895

<210> 5840
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 5840
 Met Ala Cys Ser His Ile Cys Cys Lys Pro Asp Val Cys Asp Gly Tyr
 1 5 10 15
 Asn Asp Thr Pro Gly Ala Leu Leu Arg Gly Glu Asp Arg Cys Trp Phe
 20 25 30
 Leu Met Val His Gly Trp Cys Pro Val Ile Phe Ser Trp Ala Val Ala
 35 40 45
 Pro Arg Gly Ser Gly Phe Pro Ala Gln Gly Ile Phe Asp Pro Cys Gln
 50 55 60
 Arg Arg Glu Arg Glu Leu Ser Trp Phe Pro Phe His Leu Phe Ser Gly
 65 70 75 80
 Cys Phe Lys Ala Asn Ile Pro Val Pro Asn Val Leu Cys Gly Leu Asn
 85 90 95
 Pro Gly Arg Gly Gln Gly His Ile Gln Val Gly Leu Ala Ser Ser Thr
 100 105 110
 Thr Phe Trp Pro Gln Gln Arg Met Gly Phe His Gln Ser Leu Ser Thr
 115 120 125
 Ser Arg Phe Pro Lys Glu Ser Pro Arg Ser
 130 135

<210> 5841
 <211> 3411
 <212> DNA
 <213> Homo sapiens

<400> 5841
ngggccttct ggtggacctc cactccacg cggggcggg tgcagggtgc gaagtggaaa
60
tggaggcggg agatggaacg cccccacct ccctcgacac tttggggcca tgaaaacca
120
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Arg Val Thr Gln Glu Phe Leu Glu Tyr His Val Asn Arg Asp Val Lys
485      490      495
Gln Gly Pro Ile Ser Asp Asn Tyr Leu Phe Thr Pro Gly Lys Ala Ala
500      505      510
Val Pro Ala Trp Glu Ala Val Glu Met Glu Ile Val Ala Gly Gln Leu
515      520      525
Val Thr Glu Ile Arg Gln Tyr Phe Tyr Arg Asn Met Thr Ala Gln Asn
530      535      540
Tyr Thr Tyr Ala Ile Arg Ser Arg Leu Thr His Val Pro Gln Gly His
545      550      555      560
Asp Gly Glu Leu Leu Cys His Arg Ile Glu Gln Glu Tyr Gln Ala Gly
565      570      575
Pro Leu Glu Leu Asn Arg Glu Ala Val Leu Arg Thr Ser Thr Asn Leu
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Asn Ser Gln Gln Val Ile Tyr Ser Asp Asn Asn Gly Tyr Gln Met Gln

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 Val Leu Leu Ser Glu Arg Ala His Gly Ile Ser Ser Gln Gly Asn Gly
 645 650 655
 Gln Val Glu Val Met Leu His Arg Arg Leu Trp Asn Asn Phe Asp Trp
 660 665 670
 Asp Leu Gly Tyr Asn Leu Thr Leu Asn Asp Thr Ser Val Val His Pro
 675 680 685
 Val Leu Trp Leu Leu Leu Gly Ser Trp Ser Leu Thr Thr Ala Leu Arg
 690 695 700
 Gln Arg Ser Ala Leu Ala Leu Gln His Arg Pro Val Val Leu Phe Gly
 705 710 715 720
 Asp Leu Ala Gly Thr Ala Pro Lys Leu Pro Gly Pro Gln Gln Gln Glu
 725 730 735
 Ala Val Thr Leu Pro Pro Asn Leu His Leu Gln Ile Leu Ser Ile Pro
 740 745 750
 Gly Trp Arg Tyr Ser Ser Asn His Thr Glu His Ser Gln Asn Leu Arg
 755 760 765
 Lys Gly His Arg Gly Glu Ala Gln Ala Asp Leu Arg Arg Val Leu Leu
 770 775 780
 Arg Leu Tyr His Leu Tyr Glu Val Gly Glu Asp Pro Val Leu Ser Gln
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<210> 5845

<211> 2762

<212> DNA

<213> Homo sapiens

<400> 5845

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<210> 5846

<211> 257

<212> PRT

<213> Homo sapiens

<400> 5846

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 Ser Ala Ile Glu Ala Met Lys Lys Ala Tyr Gln Glu Leu Ser Arg
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 Lys Gln His Gln Ser Asp Val Glu Ala Leu Lys Arg Glu Leu Gln Val
 85 90 95
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 100 105 110
 Arg Gln Ala Glu Glu Arg Glu His Thr Leu Arg Arg Cys Gln Gln Glu
 115 120 125
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 130 135 140
 Glu Glu Ile Asp Gln Leu Arg Gly Phe Ile Ala Ser Gln Gly Met Gly
 145 150 155 160
 Asn Gly Cys Gly Arg Ser Asn Glu Arg Ser Ser Cys Glu Leu Glu Val
 165 170 175
 Leu Leu Arg Val Lys Glu Asn Glu Leu Gln Tyr Leu Lys Lys Glu Val
 180 185 190
 Gln Cys Leu Arg Asp Glu Leu Gln Met Met Gln Lys Asp Lys Arg Phe
 195 200 205
 Thr Ser Gly Lys Tyr Gln Asp Val Tyr Val Glu Leu Ser His Ile Lys

210		215		220											
Thr	Arg	Ser	Glu	Arg	Glu	Ile	Glu	Gln	Leu	Lys	Glu	His	Leu	Arg	Leu
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<210> 5847
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 <212> DNA
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<210> 5848
 <211> 120
 <212> PRT

<213> Homo sapiens

<400> 5848

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Asn Met Ala Asn Leu Phe Ile Arg Lys Met Val Asn Pro Leu Leu Tyr
 20             25             30
Leu Ser Arg His Thr Val Lys Pro Arg Ala Leu Ser Thr Phe Leu Phe
 35             40             45
Gly Ser Ile Arg Gly Ala Ala Pro Val Ala Val Glu Pro Gly Ala Ala
 50             55             60
Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
 65             70             75             80
Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
 85             90             95
Tyr Leu Val Lys Arg Arg Gly Arg Trp Tyr Val Tyr Cys Lys Thr His
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Pro Arg His Lys Gln Arg Gln Met
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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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840

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<210> 5850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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 35 40 45
 Gly Pro Ile His Ile Ala Glu Gly Gly Arg Gly Arg Pro Pro Gly
 50 55 60
 Ser Ala Ser Asn Pro Gln Pro Pro Gly Ser Pro His Cys Pro Ser Ala
 65 70 75 80
 Gly Leu Ser Pro Val Pro Gly Val Gly Gly Arg Gln Cys Pro Gly Thr
 85 90 95
 Val Pro Arg Val Arg Arg Pro Gly Leu Ala Gly His Pro Val Thr His
 100 105 110
 Arg Ile Asn Arg Lys Thr Ala Ser Pro Pro Asn Leu Cys Pro Arg His
 115 120 125
 Asn Met Ser Arg Ser Glu Ser Cys Thr Pro Arg Ser Arg Ala Pro Leu
 130 135 140
 Gln Arg Thr Leu Thr Pro Pro Arg Gly Ala
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<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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			20					25				30			
Leu	Thr	Lys	Gly	Thr	Ser	Ala	Ala	His	Leu	Asn	Ser	Met	Glu	Val	Thr
		35				40					45				
Thr	Glu	Asp	Thr	Ser	Arg	Thr	Asp	Ala	Tyr	Glu	Ser	Tyr	Lys	Lys	Lys
	50				55					60					
Asp	Tyr	Thr	Gln	Val	Asp	Tyr	Leu	Ile	Asn	Gly	Met	Tyr	Ala	Asp	Ser
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Glu	Met														

<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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<210> 5854

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5854

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 Thr Pro Ser Gly Arg Ser Gly Pro Ala Ala Pro Trp Arg Thr Pro Ala
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 Arg Thr Pro Pro Arg Leu Leu Pro Thr Leu Cys Pro Val Thr Pro Val
 50 55 60
 Ser Trp Pro Leu
 65

<210> 5855

<211> 362

<212> DNA

<213> Homo sapiens

<400> 5855

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 362

<210> 5856

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5856

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      20           25           30
Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
      35           40           45
Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
      50           55           60
His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
      65           70           75           80
Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
      85           90           95
His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
      100          105          110
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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840

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<210> 5858

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5858

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 Gly Gly Gln Gly Arg Gly Gly Glu Lys Pro Pro His Leu Ala Ala Leu
 35 40 45
 Ile Leu Ala Arg Gly Gly Ser Lys Gly Ile Pro Leu Lys Asn Ile Lys
 50 55 60
 His Leu Ala Gly Val Pro Leu Ile Gly Trp Val Leu Arg Ala Ala Leu
 65 70 75 80
 Asp Ser Gly Ala Phe Gln Ser Val Trp Val Ser Thr Asp His Asp Glu
 85 90 95
 Ile Glu Asn Val Ala Lys Gln Phe Gly Ala Gln Val His Arg Arg Ser
 100 105 110
 Ser Glu Val Ser Lys Asp Ser Ser Thr Ser Leu Asp Ala Ile Ile Glu

115	120	125
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Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met		
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Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His		
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Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu		
175	180	185
Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp		
190	195	200
Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu		
205	210	215
Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met		
220	225	230
Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile		
235	240	245
Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu		
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Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn		
265	270	275
Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp		
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Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu		
295	300	305
Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser		
310	315	320
Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala		
325	330	335
Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val		
340	345	350
Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val		
355	360	365
Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala		
370	375	380
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu		
385	390	395
Phe Ala Glu His Ile Cys Leu Leu Met Glu Lys Val Asn Asn Ser Cys		
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Gln Lys	415	420
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<210> 5859
 <211> 2267
 <212> DNA
 <213> Homo sapiens

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420
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480
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1800

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 1920
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 2160
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 2267

<210> 5860
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 5860
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 Ser Arg Ala Ser Glu Ala Ser Gly Ser Leu Leu Leu Arg Phe Phe Leu
 35 40 45
 Gln Met Gly Leu Gly Arg Cys Arg Phe Cys Phe Ser Pro Trp Leu Pro
 50 55 60
 Val Arg Pro Gln Pro Ser Gly Cys Asp Ile Ile Glu Ser Ala Val Ser
 65 70 75 80
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<210> 5861
 <211> 1951
 <212> DNA
 <213> Homo sapiens

<400> 5861
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<210> 5862
 <211> 514
 <212> PRT
 <213> Homo sapiens

<400> 5862
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 35 40 45
 Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
 50 55 60
 Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
 65 70 75 80
 Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
 85 90 95
 Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
 100 105 110
 Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
 115 120 125
 Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
 130 135 140
 Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
 145 150 155 160
 Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
 165 170 175
 Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
 180 185 190
 Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
 195 200 205
 Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala
 210 215 220
 Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
 225 230 235 240
 Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
 245 250 255
 Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
 260 265 270
 Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
 275 280 285
 Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
 290 295 300
 Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
 305 310 315 320
 Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
 325 330 335
 Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
 340 345 350
 Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
 355 360 365
 Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu

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      370      375      380
Arg Thr Val Ser Met Leu Glu Tyr Phe Ile Asn Arg Ser Trp Glu Trp
385      390      395      400
Ser Thr Tyr Asn Thr Glu Met Leu Met Ser Glu Leu Ser Pro Glu Asp
      405      410      415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
      420      425      430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
      435      440      445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
      450      455      460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
465      470      475      480
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
      485      490      495
Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr Leu
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Lys Val

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<210> 5863
 <211> 438
 <212> DNA
 <213> Homo sapiens

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<400> 5863
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180
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240
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300
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420
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438

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<210> 5864
 <211> 104
 <212> PRT
 <213> Homo sapiens

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<400> 5864
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Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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<210> 5866
 <211> 212
 <212> PRT
 <213> Homo sapiens

<400> 5866
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 20 25 30
 Arg Ala Gly Arg Thr Ala Arg Ala Asn Asn Pro Gly Ile Val Leu Thr
 35 40 45
 Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile Glu Glu Leu
 50 55 60
 Leu Val Glu Arg Thr Gly Ala Pro Phe Cys Ser Pro Thr Ser Ser Gly
 65 70 75 80
 Trp Arg Arg Ser Arg Ala Ser Ala Ile Ala Ala Gly Val His Pro Gln
 85 90 95
 Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu
 100 105 110
 Lys Glu Ile Lys Glu Glu Leu His Ser Glu Lys Leu Lys Thr Tyr
 115 120 125
 Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro
 130 135 140
 Leu His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr
 145 150 155 160
 Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg
 165 170 175
 Lys Lys Leu Ser Ser Ser Cys Arg Lys Ala Lys Arg Ala Lys Ser Gln
 180 185 190
 Asn Pro Leu Arg Ser Phe Lys His Lys Gly Lys Lys Phe Arg Pro Thr
 195 200 205
 Ala Lys Pro Ser
 210

<210> 5867
 <211> 1882
 <212> DNA
 <213> Homo sapiens

<400> 5867
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 180
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480
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1860

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1882

<210> 5868

<211> 131

<212> PRT

<213> Homo sapiens

<400> 5868

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			20				25						30		
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		35					40					45			
Ile	Pro	Tyr	Val	Thr	Tyr	Asp	Glu	Asp	Tyr	Glu	Gln	Leu	Val	Glu	Asp
	50					55					60				
Ile	Val	Arg	Asp	Gly	Arg	Leu	Tyr	Ala	Ser	Glu	Asn	His	Gln	Glu	Ile
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Leu	Lys	Asp	Lys	Lys	Leu	Ile	Lys	Ala	Phe	Phe	Glu	Val	Leu	Ala	His
			85						90					95	
Pro	Gln	Asn	Tyr	Phe	Lys	Tyr	Thr	Glu	Lys	His	Lys	Glu	Met	Leu	Pro
		100					105						110		
Lys	Ser	Phe	Ile	Lys	Leu	Leu	Arg	Ser	Lys	Val	Ser	Ser	Phe	Leu	Arg
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<210> 5869

<211> 910

<212> DNA

<213> Homo sapiens

<400> 5869

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<213> Homo sapiens

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<211> 2217

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 5873

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<211> 1648

<212> PRT

<213> Homo sapiens

<400> 5876

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 Val Ala Ser Ala Val Cys Leu Arg Leu His Arg Pro Arg Asp Ala Ser

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<211> 683

<212> DNA

<213> Homo sapiens

<400> 5877

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<211> 227

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 Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln
 65 70 75 80
 His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly
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 Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly
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 <213> Homo sapiens

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<213> Homo sapiens

<400> 5882

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 35 40 45
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 50 55 60
 Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 5885

<211> 1905

<212> DNA

<213> Homo sapiens

<400> 5885

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<210> 5886

<211> 265

<212> PRT

<213> Homo sapiens

<400> 5886

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 35 40 45
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 Tyr Arg His Asp Met Val Ala Val Leu Gly Glu Thr Thr Gly His Arg
 65 70 75 80
 Thr Leu Lys Val Leu Arg Asp Gln Met Arg Arg Asp Pro Glu Gly Ala
 85 90 95
 Gln Ile Leu Gln Glu Arg Pro Arg Ile Ser Thr Ser Thr Leu Asp Leu
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 Gly Lys Leu Gln Ser Leu Pro Glu Gly Ser Leu Gly Arg Glu Tyr Leu
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 130 135 140
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Asn Gly Arg	Arg Ala Pro Cys Val Leu	Asn Leu Tyr Tyr Glu	Arg Arg		
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<212> PRT

<213> Homo sapiens

<400> 5888

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<210> 5890

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5890

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 Glu Glu Arg Gln Gln His Gly Glu Cys Pro Val Pro Thr Pro Trp Lys

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<210> 5891

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5891

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 Leu Val Met Thr Phe Leu Phe Arg Asn Gly Ser Leu Gln Glu Lys Leu
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 Phe Val Phe Thr Tyr Lys Gly Leu Arg Ala Leu Gln Ser Tyr Ile Gln
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 Gly Lys Thr Tyr Pro Ala His Ala Phe Leu Ala Ala Phe Leu Gly Gly
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 Ile Leu Val Phe Gly Glu Asn Asn Asn Ile Asn Ser Gln Ile Asn Met
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 Lys Gly Tyr Ile Pro Glu Pro Arg Trp Asp Pro Phe Pro Leu Leu Thr
 145 150 155 160
 Ala Val Val Trp Gly Leu Val Leu Trp Leu Phe Glu Tyr His Arg Ser
 165 170 175
 Thr Leu Gln Pro Ser Leu Gln Ser Ser Met Thr Tyr Leu Tyr Glu Asp
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<210> 5893
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 <213> Homo sapiens

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<210> 5894

<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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 Arg Arg Lys Lys Lys Ala Lys Arg Thr Thr Asn Trp Lys Ile Ile
 35 40 45
 Thr Asp Arg Pro Gly Phe His Asp Glu Ser Ala Ile Tyr Pro Val Gly
 50 55 60
 Tyr Cys Ser Thr Arg Ile Tyr Ala Ser Met Lys Cys Pro Asp Gln Lys
 65 70 75 80
 Cys Leu Tyr Thr Cys Gln Ile Lys Asp Gly Gly Val Gln Pro Gln Phe
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 Glu Ile Val Pro Glu Asp Asp Pro Gln Asn Ala Ile Val Ser Ser Ser
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 Ala Asp Ala Cys His Ala Glu Leu Leu Arg Thr Ile Ser Thr Thr Met
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 Gly Lys Leu Met Pro Asn Leu Leu Pro Ala Gly Ala Asp Phe Phe Gly
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 Phe Ser His Pro Ala Ile His Asn Leu Ile Gln Ser Cys Pro Gly Ala
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 Arg Lys Cys Ile Asn Tyr Gln Trp Val Lys Phe Asp Val Cys Lys Pro
 165 170 175
 Gly Asp Gly Gln Leu Pro Glu Gly Leu Pro Glu Asn Asp Ala Ala Met
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 Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp
 195 200 205
 Pro Leu Leu Pro Gly Ser Leu Asp Leu Pro Glu Leu Gln Pro Ala Ala
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 Phe Val Ser Ser Tyr Gln Pro Met Tyr Leu Thr His Glu Pro Leu Val
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<210> 5896

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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Thr	Phe	Val	Cys	Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe
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Trp	Thr	Pro	Asn	Val	Ser	Glu	Lys	Ile	Leu	Ile	Asp	Ile	Ile	Gly	Val
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Asp	Phe	Ala	Phe	Ala	Glu	Leu	Cys	Val	Val	Pro	Leu	Arg	Ile	Phe	Ser
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<210> 5897

<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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			20					25					30		
Glu	Ile	Cys	Ala	Asp	Glu	Phe	Pro	Gly	Ser	Ser	Ala	Thr	Tyr	Arg	Ile
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Leu	Glu	Val	Gly	Cys	Gly	Val	Gly	Asn	Thr	Val	Phe	Pro	Ile	Leu	Gln
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Thr	Asn	Asn	Asp	Pro	Gly	Leu	Phe	Val	Tyr	Cys	Cys	Asp	Phe	Ser	Ser
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Thr	Ala	Ile	Glu	Leu	Val	Gln	Thr	Asn	Ser	Glu	Tyr	Asp	Pro	Ser	Arg
			85					90						95	
Cys	Phe	Ala	Phe	Val	His	Asp	Leu	Cys	Asp	Glu	Glu	Lys	Ser	Tyr	Pro
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Val	Pro	Lys	Gly	Ser	Leu	Asp	Ile	Ile	Ile	Leu	Ile	Phe	Val	Leu	Ser
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			165						170					175	
Phe	Tyr	Val	Arg	Gly	Asp	Gly	Thr	Arg	Val	Tyr	Phe	Phe	Thr	Gln	Glu
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Glu	Leu	Asp	Thr	Leu	Phe	Thr	Thr	Ala	Gly	Leu	Glu	Lys	Val	Gln	Asn
		195					200					205			
Leu	Val	Asp	Arg	Arg	Leu	Gln	Val	Asn	Arg	Gly	Lys	Gln	Leu	Thr	Met
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<210> 5899

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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<211> 454

<212> PRT

<213> Homo sapiens

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Leu Phe Lys Val Leu Ser Val Gly Arg Gly Gly Ser Pro Arg Leu Gln
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Pro Asp Ser Arg Ala Leu His Tyr Met Lys Lys Leu Tyr Lys Thr Tyr
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Ala Thr Lys Glu Gly Ile Pro Lys Ser Asn Arg Ser His Leu Tyr Asn
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Val Val Ala Ile Lys Lys Met Ser Tyr Ser Gly Lys Gln Thr His Glu
 50           55           60
Lys Trp Gln Asp Ile Leu Lys Glu Val Lys Phe Leu Arg Gln Leu Lys
 65           70           75           80
His Pro Asn Thr Ile Glu Tyr Lys Gly Cys Tyr Leu Lys Glu His Thr
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Ala Trp Leu Val Met Glu Tyr Cys Leu Gly Ser Ala Ser Asp Leu Leu
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Glu Val His Lys Lys Pro Leu Gln Glu Val Glu Ile Ala Ala Ile Thr
115          120          125
His Gly Ala Leu His Gly Leu Ala Tyr Leu His Ser His Ala Leu Ile
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His Arg Asp Ile Lys Ala Gly Asn Ile Leu Leu Thr Glu Pro Gly Gln
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Val Lys Leu Ala Asp Phe Gly Ser Ala Ser Met Ala Ser Pro Ala Asn
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Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ile Leu Ala
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Met Asp Glu Gly Gln Tyr Asp Gly Lys Val Asp Ile Trp Ser Leu Gly
195          200          205
Ile Thr Cys Ile Glu Leu Ala Glu Arg Lys Pro Pro Leu Phe Asn Met
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Asn Ala Met Ser Ala Leu Tyr His Ile Ala Gln Asn Asp Ser Pro Thr
225          230          235          240
Leu Gln Ser Asn Glu Trp Thr Asp Ser Phe Arg Arg Phe Val Asp Tyr
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Cys Leu Gln Lys Ile Pro Gln Glu Arg Pro Thr Ser Ala Glu Leu Leu
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Arg His Asp Phe Val Arg Arg Asp Arg Pro Leu Arg Val Leu Ile Asp
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370          375          380
Glu Ser Thr Ile Asn Ser Ser Ser Ser Val Val His Lys Lys Asp His

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          420          425          430
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          435          440          445
His Glu His Glu Gln Glu Asn Glu Leu Arg Glu Gln Met Ser Gly Tyr
          450          455          460
Lys Arg Met Arg Arg Gln His Gln Lys Gln Leu Ile Ala Leu Glu Asn
465          470          475          480
Lys Leu Lys Ala Glu Met Asp Glu His Arg Leu Lys Leu Gln Lys Glu
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Lys Lys Gln Val Ala Ile Ile Glu Lys Glu Ala Lys Val Ala Ala Ala
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Asp Glu Lys Lys Phe Gln Gln Gln Ile Leu Ala Gln Gln Lys Lys Asp
530          535          540
Leu Thr Thr Phe Leu Glu Ser Gln Lys Lys Gln Tyr Lys Ile Cys Lys
545          550          555          560
Glu Lys Ile Lys Glu Glu Met Asn Glu Asp His Ser Thr Pro Lys Lys
          565          570          575
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Thr Thr Lys Asn Cys Arg Phe Phe Lys Arg Lys Ile Met Ile Lys Arg
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625          630          635          640
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          645          650          655
Thr Arg Glu Leu Glu Tyr Arg Gln Leu His Thr Leu Gln Lys Leu Arg
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Met Asp Leu Ile Arg Leu Gln His Gln Thr Glu Leu Glu Asn Gln Leu
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Glu Tyr Asn Lys Arg Arg Glu Arg Glu Leu His Arg Lys His Val Met
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705          710          715          720
Lys Lys Gln Phe Gln Asp Thr Cys Lys Val Gln Thr Lys Gln Tyr Lys
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Thr Ile Leu Lys Thr Leu Lys Asp Glu Gln Thr Arg Lys Leu Ala Ile
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770          775          780
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785          790          795          800
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Ile Lys Met Gln Thr Glu Ala Gln His Glu Arg Glu Leu Gln Lys Leu

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 Ala Ser Ser Ser Ser Leu Leu Asn Arg Leu Gln Leu Asp Asp Asp Ile

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Ser Thr Arg Val Glu Phe Asp Leu Pro Glu Tyr Ser Val Arg Arg Arg
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Tyr Gln Asp Phe Asp Trp Leu Arg Ser Lys Leu Glu Glu Ser Gln Pro
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Thr His Leu Ile Pro Pro Leu Pro Glu Lys Phe Val Val Lys Gly Val
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Val Asp Arg Phe Ser Glu Glu Phe Val Glu Thr Arg Arg Lys Ala Leu
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Asp Lys Phe Leu Lys Arg Ile Thr Asp His Pro Val Leu Ser Phe Asn
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Glu His Phe Asn Ile Phe Leu Thr Ala Lys Asp Leu Asn Ala Tyr Lys
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<211> 981
 <212> PRT
 <213> Homo sapiens

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 Pro Gly Pro Val Arg Arg Pro Met Arg Lys Ser Phe Ser Gln Pro Gly
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 65 70 75 80
 Ser Ser Gly Phe Phe Ser Ser Phe Glu Glu Ser Asp Ile Glu Asn His
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 100 105 110
 Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser
 115 120 125
 Pro Asp Thr Lys Lys Ile Ala Leu Glu Lys Asn Phe Lys Glu Ile Ser
 130 135 140
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 Arg Glu Ser Ser Gly Gly Gly Phe His Phe Val Cys Tyr Val Phe
 165 170 175
 Gln Cys Thr Asn Glu Ala Leu Val Asp Glu Ile Met Met Thr Leu Lys
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 Gln Ala Phe Thr Val Ala Ala Val Gln Gln Thr Ala Lys Ala Pro Ala
 195 200 205
 Gln Leu Cys Glu Gly Cys Pro Leu Gln Ser Leu His Lys Leu Cys Glu
 210 215 220
 Arg Ile Glu Gly Met Asn Ser Ser Lys Thr Lys Leu Glu Leu Gln Lys
 225 230 235 240
 His Leu Thr Thr Leu Thr Asn Gln Glu Gln Ala Thr Ile Phe Glu Glu
 245 250 255
 Val Gln Lys Leu Arg Pro Arg Asn Glu Gln Arg Glu Asn Glu Leu Ile
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 Ile Ser Phe Leu Arg Cys Leu Tyr Glu Glu Lys Gln Lys Glu His Ile
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 His Ile Gly Glu Met Lys Gln Thr Ser Gln Met Ala Ala Glu Asn Ile
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 325 330 335
 Ser Arg Gly Asn Lys Ala Arg Gly Leu Gln Glu His Ser Ile Ser Val
 340 345 350
 Asp Leu Asp Ser Ser Leu Ser Ser Thr Leu Ser Asn Thr Ser Lys Glu
 355 360 365
 Pro Ser Val Cys Glu Lys Glu Ala Leu Pro Ile Ser Glu Ser Ser Phe
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 Lys Leu Leu Gly Ser Ser Glu Asp Leu Ser Ser Asp Ser Glu Ser His

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Asp Met Ile Ile Leu Gln Ile Gln Met Tyr Gln Leu Ser Arg Leu Leu
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<211> 93

<212> PRT

<213> Homo sapiens

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<211> 4130

<212> DNA

<213> Homo sapiens

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<211> 1252

<212> PRT

<213> Homo sapiens

<400> 5922

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Tyr Ala Tyr Arg Asp Ser Met Thr Asp Val Ile Val Gln His Leu Ile
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Tyr Phe Arg Ser Leu Leu Pro Asp Ala Ser Ile Thr Met Cys Pro Ser
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Cys Phe Gln Val Gly Gly His Pro Gly Ser Ser His Val Leu Leu Leu
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 <212> DNA
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<213> Homo sapiens

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<211> 4538

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<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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 35 40 45
 Ala Pro Pro Pro Ile Ser Pro Val Leu Pro Leu Val Pro Pro Pro Ala
 50 55 60
 Thr Ala Leu Asn Pro Pro Ala Pro Pro Thr Phe His Gln Pro Gln Lys
 65 70 75 80
 Phe Ala Gly Val Asn Lys Ala Pro Ser Val Ile Thr His Thr Ala Ser
 85 90 95
 Ala Thr Leu Thr His Asp Ala Pro Ala Thr Thr Phe Ser Gln Ser Gln
 100 105 110
 Gly Leu Val Ile Thr Thr His His Pro Ala Pro Ser Ala Ala Pro Cys
 115 120 125
 Gly Leu Ala Leu Ser Pro Val Thr Arg Pro Pro Gln Pro Arg Leu Thr
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 Phe Val His Pro Lys Pro Val Ser Leu Thr Gly Gly Arg Pro Lys Gln
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 Pro His Lys Ile Val Pro Ala Pro Lys Pro Glu Pro Val Ser Leu Val
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 Leu Lys Asn Ala Arg Ile Ala Pro Ala Ala Phe Ser Gly Gln Pro Gln
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 Ala Val Ile Met Thr Ser Gly Pro Leu Lys Arg Glu Gly Met Leu Ala
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 Ser Thr Val Ser Gln Ser Asn Val Val Ile Ala Pro Ala Ala Ile Ala
 210 215 220
 Arg Ala Pro Gly Val Pro Glu Phe His Ser Ser Ile Leu Val Thr Asp
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 Leu Gly His Gly Thr Ser Ser Pro Pro Ala Pro Val Ser Arg Leu Phe
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260 265 270
 His Gly Gly Ser Pro Gln Val Thr Val Thr Gly Pro Ser Arg Asp Cys
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 Pro Asn Ser Gly Gln Ala Ser Pro Cys Ala Ser Glu Gln Ser Pro Ser
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 305 310 315 320
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 325 330 335
 Lys Arg Arg Phe Asn Ile Lys Met Cys Phe Asp Met Leu Asn Ser Leu
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 Thr Val Glu Tyr Ile Thr Lys Leu Gln Gln Glu Arg Gly Gln Met Gln
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 Glu Glu Ala Arg Arg Leu Arg Glu Glu Ile Glu Glu Leu Asn Ala Thr
 385 390 395 400
 Ile Ile Ser Cys Gln Gln Leu Leu Pro Ala Thr Gly Val Pro Val Thr
 405 410 415
 Arg Arg Gln Phe Asp His Met Lys Asp Met Phe Asp Glu Tyr Val Lys
 420 425 430
 Thr Arg Thr Leu Gln Asn Trp Lys Phe Trp Ile Phe Ser Ile Ile Ile
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 Lys Pro Leu Phe Glu Ser Phe Lys Gly Met Val Ser Thr Ser Ser Leu
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 Glu Glu Leu His Arg Thr Ala Leu Ser Trp Leu Asp Gln His Cys Ser
 465 470 475 480
 Leu Pro Ile Leu Arg Pro Met Val Leu Ser Thr Leu Arg Gln Leu Ser
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 Ser Lys Ala Val Thr Arg Ile Gly Lys Arg Leu Gly Glu Ser
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<210> 5927
 <211> 1786
 <212> DNA
 <213> Homo sapiens

<400> 5927
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<210> 5928

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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Leu Asp Leu Pro Ser Leu Thr Ser Leu Leu Ser Glu Lys Ala Lys Glu
      35           40           45
Phe Leu Met Glu Asn Arg Val Gln Ser Phe Tyr Gln Gln Glu Leu Glu
      50           55           60
Met Val Glu Ser Leu Leu Ser Leu Ala Asn Gln Pro Val Ile His Ser
      65           70           75           80
Ala Cys Ser Asp Gln Val Asn Phe Lys Lys Asp Thr Thr Ser Lys Ala
      85           90           95
Ile His Ser Ile Phe Lys Asn Ala Ile Gln Leu Leu Gln Glu Lys Gly
      100          105          110
Leu Val Phe Gln Lys Asp Asp Gly Phe Asp Asn Leu Tyr Tyr Val Thr
      115          120          125
Arg Glu Asp Lys Asp Leu His Arg Lys Ile His Arg Ile Ile Gln Gln
      130          135          140
Asp Cys Gln Lys Pro Asn His Met Glu Lys Gly Cys His Phe Leu His
      145          150          155          160
Ile Leu Ala Cys Ala Arg Leu Ser Ile Arg Pro Gly Leu Ser Glu Ala
      165          170          175
Val Leu Gln Gln Val Leu Glu Leu Leu Glu Asp Gln Ser Asp Ile Val
      180          185          190
Ser Thr Met Glu His Tyr Tyr Thr Ala Phe
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<210> 5929

<211> 606

<212> DNA

<213> Homo sapiens

<400> 5929

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606

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<210> 5930
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 5930
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 20 25 30
 Lys Glu Pro Leu Gly Arg Ala Glu Arg Pro Gly Arg Pro Cys Thr Arg
 35 40 45
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
 50 55 60
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
 65 70 75 80
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
 85 90 95
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile
 100 105 110
 Gly Ser His Pro Val Pro Gln Pro Leu Gln Ser Phe Asp Ser Phe Arg
 115 120 125
 Gly Ala His His His His His His His Pro His Pro His His Ala
 130 135 140

<210> 5931
 <211> 478
 <212> DNA
 <213> Homo sapiens

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 120
 aggtccttaa acaggtaccg ccaggctgga agcagtgggc cagggaaattc tcagaacagc
 180
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<210> 5932
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 5932

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Glu Arg Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln
 35           40           45
Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln
 50           55           60
Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys
 65           70           75           80
Pro Glu Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu
 85           90           95
Glu Glu Ile Gln Gln Glu Leu Ile Asn Gln Gly Thr Thr
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<210> 5933

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 5933

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960

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 1080
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<210> 5934

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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 20 25 30
 Ser Lys Val Arg Glu Gln Leu Glu Gln Glu Leu Glu Leu Thr Ala
 35 40 45
 Ser Leu Phe Glu Glu Ala His Lys Met Val Arg Glu Ala Asn Met Lys
 50 55 60
 Gln Ala Ala Ser Glu Lys Gln Leu Lys Glu Ala Arg Gly Lys Ile Asp
 65 70 75 80
 Met Leu Gln Ala Glu Val Thr Ala Leu Lys Thr Leu Val Ile Thr Ser
 85 90 95
 Thr Pro Ala Ser Pro Asn Arg Glu Leu His Pro Gln Leu Leu Ser Pro


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Thr Lys Ala Gly Pro Arg Lys Gly His Ser Arg His Lys Ser Thr Ser
      115      120      125
Ser Thr Leu Cys Pro Ala Val Cys Pro Ala Ala Gly His Thr Leu Thr
      130      135      140
Pro Asp Arg Glu Gly Lys Glu Val Asp Thr Ile Leu Phe Ala Glu Phe
      145      150      155      160
Gln Ala Trp Arg Glu Ser Pro Thr Leu Asp Lys Thr Cys Pro Phe Leu
      165      170      175
Glu Arg Val Tyr Arg Glu Asp Val Gly Pro Cys Leu Asp Phe Thr Met
      180      185      190
Gln Glu Leu Ser Val Leu Val Arg Ala Ala Val Glu Asp Asn Thr Leu
      195      200      205
Thr Ile Glu Pro Val Ala Ser Gln Thr Leu Pro Thr Val Lys Val Ala
      210      215      220
Glu Val Asp Cys Ser Ser Thr Asn Thr Cys Ala Leu Ser Gly Leu Thr
      225      230      235      240
Arg Thr Cys Arg His Arg Ile Arg Leu Gly Asp Ser Lys Ser His Tyr
      245      250      255
Tyr Ile Ser Pro Ser Ser Arg Ala Arg Ile Thr Ala Val Cys Asn Phe
      260      265      270
Phe Thr Tyr Ile Arg Tyr Ile Gln Gln Gly Leu Val Arg Gln Asp Ala
      275      280      285
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<210> 5935

<211> 2727

<212> DNA

<213> Homo sapiens

<400> 5935

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<211> 154

<212> PRT

<213> Homo sapiens

<400> 5936

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			20					25					30		
Asp	Gln	Glu	Pro	Pro	Pro	Pro	Tyr	Gln	Glu	Gln	Val	Pro	Val	Pro	Val
		35					40				45				
Tyr	His	Pro	Thr	Pro	Ser	Gln	Thr	Arg	Leu	Ala	Thr	Gln	Leu	Thr	Glu
		50				55					60				
Glu	Glu	Gln	Ile	Arg	Ile	Ala	Gln	Arg	Ile	Gly	Leu	Ile	Gln	His	Leu
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Pro	Lys	Gly	Val	Tyr	Asp	Pro	Gly	Arg	Asp	Gly	Ser	Glu	Lys	Lys	Ile
			85					90					95		
Arg	Glu	Cys	Val	Ile	Cys	Met	Met	Asp	Phe	Val	Tyr	Gly	Asp	Pro	Ile
			100					105					110		
Arg	Phe	Leu	Pro	Cys	Met	His	Ile	Tyr	His	Leu	Asp	Cys	Ile	Asp	Asp
		115				120					125				
Trp	Leu	Met	Arg	Ser	Phe	Thr	Cys	Pro	Ser	Cys	Met	Glu	Pro	Val	Asp
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<210> 5937

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 5937

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<210> 5938

<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
 35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
 50           55           60
Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
65           70           75           80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
    85           90           95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
   100          105          110
Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu
   115          120          125
Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
   130          135          140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
145           150           155           160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
   165          170          175
Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
   180          185          190
Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
   195          200          205
Leu Leu Leu Cys Asn Arg Asn Asp Thr Ala Trp Asp Glu Leu Lys Leu
   210          215          220
Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro
225           230           235           240
Trp Ala Leu Leu Gly Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
   245          250          255
Ile Arg His Lys Thr His Asn Asp Pro Glu Ser Ile Leu Lys Asp Asp
   260          265          270
Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
   275          280          285
Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile
   290          295          300
Leu Thr Asp Met Lys Tyr Gly His Leu Trp Ser Val Gln Ala Asp Ser
305           310           315           320
Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
   325          330          335
Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr
   340          345          350
Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
   355          360          365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
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Val Ile Glu Asp Lys Asn

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405

<210> 5939

<211> 795

<212> DNA

<213> Homo sapiens

<400> 5939

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<210> 5940

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5940

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20          25          30
Ala Ile Phe Lys Glu Asn Lys Arg Pro Ser Lys Glu Met Gln Val Thr
35          40          45
Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
50          55          60
Met Asn Ala Arg Arg Arg Cys Met Asn Arg Trp Ala Glu Glu Pro Ser
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5121

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<210> 5941
<211> 2590
<212> DNA
<213> Homo sapiens

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<210> 5942

<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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			20					25				30			
Pro	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys


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<210> 5943

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5943

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<210> 5944

<211> 174

<212> PRT

<213> Homo sapiens

<400> 5944

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          20          25          30
Gly Val Ser Ser Ile Thr Lys Leu Gln Arg Gln Pro Phe Gly Val Glu

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	35						40				45						
Thr	Lys	Pro	Gly	Ile	Leu	Cys	Cys	Phe	Gln	Asn	Glu	Phe	Glu	Asn	Pro		
	50					55					60						
Cys	Phe	Pro	Lys	Ser	His	Phe	Ser	Val	Thr	Gln	Ala	Gly	Glu	Gln	Trp		
65					70					75					80		
Arg	Asp	Leu	Ser	Ser	Pro	Gln	Pro	Pro	Pro	Pro	Arg	Phe	Lys	Gln	Phe		
				85					90					95			
Ser	Cys	Leu	Ser	Leu	Pro	Ser	Ser	Trp	Asp	His	Arg	His	Pro	Pro	Pro		
			100				105						110				
Arg	Pro	Ala	Asn	Phe	Cys	Ile	Phe	Ser	Arg	Asp	Glu	Val	Ser	Pro	Arg		
		115					120					125					
Ser	Arg	Ser	Pro	Asp	Leu	Met	Xaa	Ser	Ala	His	Leu	Gly	Leu	Pro	Lys		
		130				135						140					
Cys	Trp	Asp	Tyr	Arg	Arg	Glu	Pro	Leu	Arg	Pro	Ala	Gln	Ile	Ser	Leu		
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<212> DNA
<213> Homo sapiens
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360					
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<210> 5946
 <211> 121
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln
 50 55 60
 Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln
 65 70 75 80
 Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu Glu Leu
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<210> 5947
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 <212> DNA
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 Thr Thr Ser Gly Asp Glu Arg Leu Tyr Pro Ser Pro Thr Ser Tyr Ile
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 His Glu Asn Tyr Leu Gln Leu Phe Glu Phe Val Gly Lys Met Leu Gly
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Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile		270
	275	280
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe		285
	290	295
Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys		300
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Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr		320
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<213> Homo sapiens

<400> 5952

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 His His Gly Asn Gly Gln Phe Thr Glu Lys Arg Val Tyr Leu Asn Ser

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<212> DNA

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<210> 5956

<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

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  210      215      220
Gly Gly Trp Gly His Met Met Gly Asp Glu Gly Ser Ala Leu Ser Ala
  225      230      235      240
Pro Ser Ala Tyr Trp Ile Ala His Gln Ala Val Lys Ile Val Phe Asp
      245      250      255
Ser Ile Asp Asn Leu Glu Ala Ala Pro His Asp Ile Gly Tyr Val Lys
  260      265      270
Gln Ala Met Phe His Tyr Phe Gln Val Pro Asp Arg Leu Gly Ile Leu
  275      280      285
Thr His Leu Tyr Arg Asp Phe Asp Lys Cys Arg Phe Ala Gly Phe Cys
  290      295      300
Arg Lys Ile Ala Glu Gly Ala Gln Gln Gly Asp Pro Leu Ser Arg Tyr
  305      310      315      320
Ile Phe Arg Lys Ala Gly Glu Met Leu Gly Arg His Ile Val Ala Val
      325      330      335
Leu Pro Glu Ile Asp Pro Val Leu Phe Gln Gly Lys Ile Gly Leu Pro
      340      345      350
Ile Leu Cys Val Gly Ser Val Trp Lys Ser Trp Glu Leu Leu Lys Glu
  355      360      365
Gly Phe Leu Leu Ala Leu Thr Gln Gly Arg Glu Ile Gln Ala Gln Asn
  370      375      380
Phe Phe Ser Ser Phe Thr Leu Met Lys Leu Arg His Ser Ser Ala Leu
  385      390      395      400
Gly Gly Ala Ser Leu Gly Ala Arg His Ile Gly His Leu Leu Pro Met
      405      410      415
Asp Tyr Ser Ala Asn Ala Ile Ala Phe Tyr Ser Tyr Thr Phe Ser
      420      425      430

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<210> 5957

<211> 855

<212> DNA

<213> Homo sapiens

<400> 5957

atggcgaggat cggtgagggtc tccgcgcgcgc tccctgtaca aactgggtggg ctgcgcgcct
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tggaagaggg ctttccggca gagatgcctg gagagaatga gaaacagccg ggacaggctc
120
ctaaacaggt accgccaggc tggaagcagt gggccaggga attctcagaa cagctttcta
180
gttcaagagg tgatggaaga agagtggaaat gctttgcagt cagtggagaa ttgtccagaa
240
gacttggctc agctggagga gctgatagac atggctgtgc tggaggaaat tcaacaggag
300
ctgatcaacc aaggcctgtg atacttgggc tgtgatcctc tagagccagc ttggactcac
360
atcattctat ggggttgaag acaactcatt ccctctgagg agccttgtag atacaagcct
420
tttatttata acttattttg tattgaaact tttaaacaat actgaagaaa aaaaaacttt
480
tccgacatct gttcttggtc ttttgtgaca caggttgaag ggggaggaaat agaaaaagac
540
aaactgcctt ggaggagata aaccaatttt atgtctatca tgttatacaa aaatctagaa
600
ataatagatt tgtacagaaa aaaatgataa taaatgagag cacaaaacat ataatttaaa
660
tctggtattt tttccccc atatttagga tgataatcat ttcaaagcac atgtctagct
720
tcagagtagg atttgttacc tggccaaagc ctgccatgaa actatggctt tcagcatctg
780
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840
gtgctccagg gctgt
855

<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

Met Ala Glu Ser Leu Arg Ser Pro Arg Arg Ser Leu Tyr Lys Leu Val
1 5 10 15
Gly Ser Pro Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg
20 25 30
Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly
35 40 45
Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val
50 55 60
Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys Pro Glu
65 70 75 80
Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu Glu Glu
85 90 95
Ile Gln Gln Glu Leu Ile Asn Gln Gly Leu

100

105

<210> 5959
 <211> 830
 <212> DNA
 <213> Homo sapiens

<400> 5959
 gatgagaaga tttagccaat attagacaaa gtaggctctt tggtaaaccg aaggcttgaa
 60
 ttttctcggg gccttatgat gctgggtctt gagaagttag ccactgatat tccttgcttg
 120
 ctatatgatg acaatctctt ctgtcatttg gtggatgaag tactcttggt tgaaaggag
 180
 ctacacagtg ttcatggcta tcctggcact ttgctaatt gtagcatat tctatcagag
 240
 gaaacctggt ttcaaagatg ggtgacgggg gagagaaaat ttgctcttca aaaaatggac
 300
 tcaatgcttt ctcagaagc tgcctgggta tcgcaatata aggatattac tgacgtggat
 360
 gaaatgaaag ttccagattg tgcagaaact ttatgactc tactcttggt tataactgac
 420
 aggtataaaa atcttccac agcttccga aagcttcagt tcctggagtt acagaaggac
 480
 ttagtagatg attttaggat acgattaaca caagtgatga aagaagagac tagagcttcc
 540
 cttggctttc gatactgtgc aattcttaat gctgtgaact acatctcaac agtactagca
 600
 gattgggctg acaatgtttt cttctacaa cttcaacagg ctgcactgga ggtgtttgca
 660
 gagaataata ctctgagtaa attgcagcta ggacagctag cctctatgga gagctctgtc
 720
 tttgatgaca tgattaacct cttagaacgt ttaaagcatg atatgttgac ccgtcaagta
 780
 gaccacgttt ttagagaagt taaagatgct gcaaaattgt ataaaaaaga
 830

<210> 5960
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 5960
 Met Met Leu Val Leu Glu Lys Leu Ala Thr Asp Ile Pro Cys Leu Leu
 1 5 10 15
 Tyr Asp Asp Asn Leu Phe Cys His Leu Val Asp Glu Val Leu Leu Phe
 20 25 30
 Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn
 35 40 45
 Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr
 50 55 60
 Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser
 65 70 75 80
 Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

				85					90					95		
Met	Lys	Val	Pro	Asp	Cys	Ala	Glu	Thr	Phe	Met	Thr	Leu	Leu	Leu	Val	
			100					105					110			
Ile	Thr	Asp	Arg	Tyr	Lys	Asn	Leu	Pro	Thr	Ala	Ser	Arg	Lys	Leu	Gln	
			115				120					125				
Phe	Leu	Glu	Leu	Gln	Lys	Asp	Leu	Val	Asp	Asp	Phe	Arg	Ile	Arg	Leu	
			130			135					140					
Thr	Gln	Val	Met	Lys	Glu	Glu	Thr	Arg	Ala	Ser	Leu	Gly	Phe	Arg	Tyr	
					150					155					160	
Cys	Ala	Ile	Leu	Asn	Ala	Val	Asn	Tyr	Ile	Ser	Thr	Val	Leu	Ala	Asp	
				165					170					175		
Trp	Ala	Asp	Asn	Val	Phe	Phe	Leu	Gln	Leu	Gln	Gln	Ala	Ala	Leu	Glu	
				180			185						190			
Val	Phe	Ala	Glu	Asn	Asn	Thr	Leu	Ser	Lys	Leu	Gln	Leu	Gly	Gln	Leu	
			195				200					205				
Ala	Ser	Met	Glu	Ser	Ser	Val	Phe	Asp	Asp	Met	Ile	Asn	Leu	Leu	Glu	
			210			215					220					
Arg	Leu	Lys	His	Asp	Met	Leu	Thr	Arg	Gln	Val	Asp	His	Val	Phe	Arg	
					230					235					240	
Glu	Val	Lys	Asp	Ala	Ala	Lys	Leu	Tyr	Lys	Lys						
				245					250							

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<210> 5961
<211> 585
<212> DNA
<213> Homo sapiens
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<400> 5961
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aatgaagcga gaccccgctc taaaaaaaaa aattgagggg tcaaagagga tgccaaactt
120
aattagagac tgagacaggg cagggtgccg aggtgtctgc atgcgtttca tgtggatgcc
180
cgtgtctatt ctggcctgct cctgggcccc ctccccactc agccctggct gatgagaatg
240
ggacagggac tcccttctcg tgtccctgtg cagcgtcggc ccaggaggta gcagagcagt
300
atatgcacat ctgggtgtgc ctccttgcgt gtccccacac atctgtcatt cctgtctttg
360
cacacctatg tgactcccgc atgttttgtt ccttatgtgt cccatgcatg ctccccatct
420
gaccttgcgt gttctcgcgt gtctgtgtgc ggccagtcct gccttcactc tctcatgggt
480
ggccctggca gcatgtcttg ctccccagca ggtgagctca ggagataaga tggaagatgc
540
aacagccaat ggtcaagaag actccaaggc cccagatggg tccac
585

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<210> 5962
<211> 114
<212> PRT
<213> Homo sapiens
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<400> 5962

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Met Cys Gly Asp Met Gln Glu Gly Thr Pro Arg Cys Ala Tyr Thr Ala
 1           5           10           15
Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
 20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
 35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
 50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
 65           70           75           80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
 85           90           95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
 100          105          110
Pro Ser

```

<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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atggggctgt ttggaagac ccaggagaag ccgcccacaa aactgggtcaa tgagtgggtca
60
ttgaagataa gaaaggaaat gagagttgtt gacaggcaaa taagggatat ccaaagagaa
120
gaagaaaaag tgaacgcatc tgtgaaagat gctgccaaag agggccagaa ggatgtctgc
180
atagttcttg ccaaggagat gatcagggtca aggaaggctg tgagcaagct gtatgcatcc
240
aaagcacaca tgaactcagt gctcatgggg atgaagaacc agctcgcggt cttgcgagtg
300
gctgggtccc tgcagaagag cacagaagtg atgaaggcca tgcaaagtct tgtgaagatt
360
ccagagattc aggccacatc gagggagttg tccaaagaaa tgatgaaggc tgggatcata
420
gaggagatgt tagaggacac ttttgaaagc atggacgac aggaagaaat ggaggaagaa
480
gcagaaatgg aaattgacag aattctcttt gaaattacag caggggcctt gggcaaagca
540
cccagtaaag tgactgatgc ccttcagag ccagaacctc caggagcgat ggctgcctca
600
gaggatgagg aggaggagga agaggctctg gaggccatgc agtcccggct ggccacactc
660
cgcagctagg ggctgcctac ccgctgggt gtgcacacac tcctctcaag agctgccatt
720
ttatgtgtct cttgcactac acctctgttg tgaggactac cattttggag aaggttctgt
780
ttgtctcttt tcattctctg ccaggtttt gggatcgcaa agggattgtt cttataaaag
840
tggcataaat aaatgcatca tttttaggag tatagacaga tatatcttat tgtggggagg
900

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ggaaagaaat ccatctgctc atgaagcact tctgaaaata taggtgattg cctgaatgct
 960
 gaagactcta cttttgtcta taaaacacta tataaatgaa ttttaataaa tttttgcttc
 1020
 agcacttggc cccattgtag attgccctgt gcagtaaact ttcaagggtg cagctgcccc
 1080
 agattgcttc atttgctggg tgtggaaaga gttgctatgg ccaggcatat gggatttgga
 1140
 agctcagcag aagtgacttc tgctctgtgg ttgctgctcc ccggctttca cagacatggt
 1200
 atggcagcca ttcttttatac tatttaacca agaggatgct ggggaattgt gctgcttgct
 1260
 ctgttggtg gtggctgcat tatgtccg
 1288

<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

Met	Gly	Leu	Phe	Gly	Lys	Thr	Gln	Glu	Lys	Pro	Pro	Lys	Glu	Leu	Val
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Asn	Glu	Trp	Ser	Leu	Lys	Ile	Arg	Lys	Glu	Met	Arg	Val	Val	Asp	Arg
			20					25				30			
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val
		35				40					45				
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50				55					60					
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65				70					75			80			
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85					90				95			
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100					105				110			
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
	115					120					125				
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130					135					140				
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145				150					155			160			
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165					170				175			
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
	180							185				190			
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
	195					200					205				
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
	210					215					220				

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 5965
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 ccgcgcccgt ccctgtacaa actggtgggc tcgccgcctt ggaaagagtc tttccggcag
 120
 agatgcctgg agagaatgag aaacagccgg gacaggctcc taaacaggtt ccgccaggct
 180
 ggaagcagtg ggcaggga tttctcagaac agctttctag ttcaagaggt gatggaagaa
 240
 gagtggaatg ctttgcagnn tcagtgggag aattgtccag aagacttggc tcagtggag
 300
 gagctgatag acatggctgt gctggaggaa attcaacagg agctgatcaa ccaagagcag
 360
 tccatcatca gcgagtatga gaagagcttg cagtttgatg aaaagtgtct cagcatcatg
 420
 ctggctgagt gggaggcaaa cccactcatc tgcctgtat gtacaaagta caacctgaga
 480
 atcacaagcg gtgtgggtgt gtgtcagtg ggcctgtcca tccatctca ttcttctgag
 540
 ttgacagagc agaagcttcg tgcctgttta gagggtagta taaatgagca cagtgcacat
 600
 tgtccccaca cacctgaatt ttcagtcact ggaggaacag aagaaaagtc cagtcttctc
 660
 atgagctgtc tggcctgtga tacttgggct gtgatcctct agagccagct tggactcaca
 720
 tcattctatg ggggtgaaga caactcatc cctctgagga gccttgtaga tacaagcctt
 780
 ttatttataa cttattttgt attgaaactt ttaaacaata ctgaagaaaa aaaaactttt
 840
 ccgacatctg ttcttggctt tttgtgacgc aggttgaagg gggaggaata gaaaagaca
 900
 aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa
 960
 taatagattt gtacagaaaa aaatgataat aaatgagaac acaaacata t
 1011

<210> 5966
 <211> 233
 <212> PRT
 <213> Homo sapiens

<400> 5966
 Gly Asn Gly Ser Cys Gly Phe Val Ser Arg Glu Glu Glu Met Ala Glu
 1 5 10 15
 Ser Leu Arg Ser Pro Arg Arg Ser Leu Tyr Lys Leu Val Gly Ser Pro
 20 25 30
 Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn
 35 40 45
 Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly
 50 55 60
 Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu
 65 70 75 80
 Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

	85		90		95										
Ala	Gln	Leu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu	Ile	Gln	
	100					105						110			
Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile	Ile	Ser	Glu	Tyr	Glu	Lys
	115					120						125			
Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser	Ile	Met	Leu	Ala	Glu	Trp
	130					135					140				
Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys	Thr	Lys	Tyr	Asn	Leu	Arg
	145					150					155			160	
Ile	Thr	Ser	Gly	Val	Val	Cys	Gln	Cys	Gly	Leu	Ser	Ile	Pro	Ser	
			165					170					175		
His	Ser	Ser	Glu	Leu	Thr	Glu	Gln	Lys	Leu	Arg	Ala	Cys	Leu	Glu	Gly
			180					185					190		
Ser	Ile	Asn	Glu	His	Ser	Ala	His	Cys	Pro	His	Thr	Pro	Glu	Phe	Ser
	195						200					205			
Val	Thr	Gly	Gly	Thr	Glu	Glu	Lys	Ser	Ser	Leu	Leu	Met	Ser	Cys	Leu
	210					215					220				
Ala	Cys	Asp	Thr	Trp	Ala	Val	Ile	Leu							
225					230										

<210> 5967

<211> 1806

<212> DNA

<213> Homo sapiens

<400> 5967

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gtctttttgcc tccagtggat cagtgttttt tcagcagaaa atcttttcctc tccattgctt

120

tgtgtttttg ttgctaggca gtcaacagca gggctactaa agcacttcta atttagacaa

180

atcttttcct ctattttaga aatggatttc aatgggtgttc agtttggttg cagaaacctc

240

ctgaaagtga gcatgttttt gaacacatta acaccgaagt tctacgtggc cctaacaggc

300

acttcctcac taatatcagg gcttattttg atatttgaat ggtgggtattt tcgcaaatac

360

ggaacttcat tcattgaaca agtctcagta agccacttgc gcccccttct gggaggggtt

420

gacaacaact cttccaacaa ttctaattcc agtaacgggg actcagattc caataggcaa

480

agtgtctcag aatgc aaagt atggcgaaat ccactaaatt tatttagggg tgctgaatac

540

aatcggtata cttgggtgac aggacgagag cctettactt actatgacat gaatctctct

600

gccaagacc accagacatt ctttacttgt gactcggacc atctgcgttc cgcagatgca

660

ataatgcaga aagcctggag agagagaaac cccaagcta ggatttctgc agctcatgaa

720

gccttgagaa taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc

780

aatgtgtgcc agaagactcg ggaggaccag ggaagcaaag cccttctgga actacaagca

840

tatgctgatg ttcaggcagt cttagcaaag tatgatgata taagcttacc aaagtcagca
 900
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 1020
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 ctacccccag aacatatacct gaagagagga gacagtgaag caatagcata tgcattcttt
 1140
 catcttgac actggaagag agtggaagg gctttgaatc ttttgattg tacgtgggaa
 1200
 ggcaacttttc ggatgatccc ttatcccttg gaaaaggggc acctatttta tccttaccga
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 1320
 ccaaagaagg agcttccctt ctttattctc tttactgctg gattatgttc cttcacagcc
 1380
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 1440
 agtggtttgcc tagagggagg ccttggggaa tggatgggga aagccaaggg cataaaagca
 1500
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 1560
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 1620
 caggttgcta ctgcatgctc tgcctcattt cacaacaaat tcttagcagt ttccaaaaa
 1680
 tgcaggaggt ccaaaggat ggaatgattt aggaaatcct agcaaatgaa aatgtgtggg
 1740
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 1800
 ctttcc
 1806

<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

Met	Asp	Phe	Asn	Gly	Val	Gln	Phe	Val	Cys	Arg	Asn	Leu	Leu	Lys	Val
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Ser	Met	Phe	Leu	Asn	Thr	Leu	Thr	Pro	Lys	Phe	Tyr	Val	Ala	Leu	Thr
			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
			35				40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
			50			55				60					
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65					70				75					80	
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
				85				90						95	
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

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      100      105      110
Tyr Asn Arg Tyr Thr Trp Val Thr Gly Arg Glu Pro Leu Thr Tyr Tyr
      115      120      125
Asp Met Asn Leu Ser Ala Gln Asp His Gln Thr Phe Phe Thr Cys Asp
      130      135      140
Ser Asp His Leu Arg Pro Ala Asp Ala Ile Met Gln Lys Ala Trp Arg
      145      150      155      160
Glu Arg Asn Pro Gln Ala Arg Ile Ser Ala Ala His Glu Ala Leu Glu
      165      170      175
Ile Asn Glu Thr Arg His Gln Cys Leu Gly Val His Gln Lys Lys Ala
      180      185      190
Ser Asn Val Cys Gln Lys Thr Arg Glu Asp Gln Gly Ser Lys Ala Leu
      195      200      205
Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr
      210      215      220
Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala
      225      230      235      240
Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Pro Glu Ala Ala
      245      250      255
Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile
      260      265      270
His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu
      275      280      285
Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp
      290      295      300
Ser Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg
      305      310      315      320
Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe
      325      330      335
Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr
      340      345      350
Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His
      355      360      365
Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe
      370      375      380
Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His
      385      390      395      400
Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Val Ser Val Cys
      405      410      415
Leu Glu Gly Gly Leu Gly Glu Trp Met Gly Lys Ala Lys Gly Ile Lys
      420      425      430
Ala Ala

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<210> 5969

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5969

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120

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<210> 5970
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 5970
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 35 40 45
 Pro Arg Trp Gln Asp Ala Asn Phe Val Leu Gly Ser Tyr Lys Thr Glu
 50 55 60
 Gln Cys Pro Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro
 65 70 75 80
 His Tyr His Asn Ser Arg Asp Arg Arg Arg Asn Pro Arg Arg Phe Gln
 85 90 95
 Tyr Arg Ser Thr Pro Cys Pro Ser Val Lys His Gly Asp Glu Trp Gly
 100 105 110
 Glu Pro Ser Arg Cys Asp Gly Gly Asp Gly Cys Gln Tyr Cys His Ser
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<210> 5971
 <211> 565
 <212> DNA
 <213> Homo sapiens

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 360
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 420
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<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

Met	His	Arg	Ala	Leu	Ser	Cys	Pro	Leu	Gly	Gln	Leu	Ser	Pro	His	Gln
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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
		20						25				30			
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
		35				40					45				
Ala	Gln	Lys	Val	Arg	Ser	Leu	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn
	50				55				60						
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65				70					75				80		
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
			85					90					95		
Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
							100								

<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 797

<210> 5974

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5974

Met	Glu	Gly	Ser	Gly	Thr	Gly	Lys	Arg	Arg	Gly	Lys	Ala	Ala	Lys	Thr
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Ser	Leu	Arg	Ile	Met	Asp	Ala	Arg	Ala	Gln	Leu	Leu	Leu	Arg	Val	Pro
			20				25					30			
His	Pro	Gly	Pro	Ser	Leu	Thr	Ser	Gly	Ala	Leu	Thr	His	Ile	Arg	Asp
		35				40					45				
Pro	His	Pro	Gly	Leu	Ser	Pro	Thr	Ser	Gly	Thr	Leu	Met	Pro	Gly	Arg
		50				55				60					
Arg	Arg	Gly	Gly	Pro	Ser	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Arg	Lys
65				70				75						80	
Cys	His	Arg	Glu	Ala	Pro	Ala	Ser	Gly	Leu	Ser	Thr	Ala	Ala	Arg	Glu
			85					90						95	
Arg	Leu	Trp	Trp	Pro	Arg	Ala	Arg	Val	Cys	Arg					
			100				105								

<210> 5975

<211> 2175

<212> DNA

<213> Homo sapiens

<400> 5975

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 aagcaggacc ttgcttatga acgtcagtat gaacagcaaa cctatcaggt gatccctgag
 420

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<210> 5976
 <211> 564
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Pro Glu Val Ile Lys Asn Phe Ile Gln Tyr Phe His Lys Thr Val Ser
 50 55 60
 Asp Leu Ile Asp Gln Lys Val Tyr Glu Leu Gln Ala Ser Arg Val Ser
 65 70 75 80
 Ser Asp Val Ile Asp Gln Lys Val Tyr Glu Ile Gln Asp Ile Tyr Glu
 85 90 95
 Asn Ser Trp Thr Lys Leu Thr Glu Arg Phe Phe Lys Asn Thr Pro Trp
 100 105 110
 Pro Glu Ala Glu Ala Ile Ala Pro Gln Val Gly Asn Asp Ala Val Phe
 115 120 125
 Leu Ile Leu Tyr Lys Glu Leu Tyr Tyr Arg His Ile Tyr Ala Lys Val
 130 135 140
 Ser Gly Gly Pro Ser Leu Glu Gln Arg Phe Glu Ser Tyr Tyr Asn Tyr
 145 150 155 160
 Cys Asn Leu Phe Asn Tyr Ile Leu Asn Ala Asp Gly Pro Ala Pro Leu
 165 170 175
 Glu Leu Pro Asn Gln Trp Leu Trp Asp Ile Ile Asp Glu Phe Ile Tyr
 180 185 190
 Gln Phe Gln Ser Phe Ser Gln Tyr Arg Cys Lys Thr Ala Lys Lys Ser
 195 200 205
 Glu Glu Glu Ile Asp Phe Leu Arg Ser Asn Pro Lys Ile Trp Asn Val
 210 215 220
 His Ser Val Leu Asn Val Leu His Ser Leu Val Asp Lys Ser Asn Ile
 225 230 235 240
 Asn Arg Gln Leu Glu Val Tyr Thr Ser Gly Gly Asp Pro Glu Ser Val
 245 250 255
 Ala Gly Glu Tyr Gly Arg His Ser Leu Tyr Lys Met Leu Gly Tyr Phe
 260 265 270
 Ser Leu Val Gly Leu Leu Arg Leu His Ser Leu Leu Gly Asp Tyr Tyr
 275 280 285
 Gln Ala Ile Lys Val Leu Glu Asn Ile Glu Leu Asn Lys Lys Ser Met
 290 295 300
 Tyr Ser Arg Val Pro Glu Cys Gln Val Thr Thr Tyr Tyr Tyr Val Gly
 305 310 315 320
 Phe Ala Tyr Leu Met Met Arg Arg Tyr Gln Asp Ala Ile Arg Val Phe

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          325          330          335
Ala Asn Ile Leu Leu Tyr Ile Gln Arg Thr Lys Ser Met Phe Gln Arg
          340          345          350
Thr Thr Tyr Lys Tyr Glu Met Ile Asn Lys Gln Asn Glu Gln Met His
          355          360          365
Ala Leu Leu Ala Ile Ala Leu Thr Met Tyr Pro Met Arg Ile Asp Glu
          370          375          380
Ser Ile His Leu Gln Leu Arg Glu Lys Tyr Gly Asp Lys Met Leu Arg
          385          390          395          400
Met Gln Lys Gly Asp Pro Gln Val Tyr Glu Glu Leu Phe Ser Tyr Ser
          405          410          415
Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn Tyr Asp Asn Val His
          420          425          430
Pro Asn Tyr His Lys Glu Pro Phe Leu Gln Gln Leu Lys Val Phe Ser
          435          440          445
Asp Glu Val Gln Gln Gln Ala Gln Leu Ser Thr Ile Arg Ser Phe Leu
          450          455          460
Lys Leu Tyr Thr Thr Met Pro Val Ala Lys Leu Ala Gly Phe Leu Asp
          465          470          475          480
Leu Thr Glu Gln Glu Phe Arg Ile Gln Leu Leu Val Phe Lys His Lys
          485          490          495
Met Lys Asn Leu Val Trp Thr Ser Gly Ile Ser Ala Leu Asp Gly Glu
          500          505          510
Phe Gln Ser Ala Ser Glu Val Asp Phe Tyr Ile Asp Lys Asp Met Ile
          515          520          525
His Ile Ala Asp Thr Lys Val Ala Arg Arg Tyr Gly Asp Phe Phe Ile
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Arg Gln Ile His Lys Phe Glu Glu Leu Asn Arg Thr Leu Lys Lys Met
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Gly Gln Arg Pro

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<210> 5977

<211> 2320

<212> DNA

<213> Homo sapiens

<400> 5977

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<210> 5978
 <211> 77
 <212> PRT
 <213> Homo sapiens

<400> 5978
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 50 55 60
 Trp Trp Tyr Thr Pro Val Ile Pro Ala Thr Gln Glu Ala
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<210> 5979
 <211> 1095
 <212> DNA
 <213> Homo sapiens

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1095

<210> 5980
<211> 169
<212> PRT
<213> Homo sapiens

<400> 5980
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35 40 45
Thr His Leu Val Leu Ile Cys Tyr Asp Val Met Asn Pro Thr Ser Tyr
50 55 60
Asp Asn Val Leu Ile Lys Trp Phe Pro Glu Val Thr His Phe Cys Arg
65 70 75 80
Gly Ile Pro Met Val Leu Ile Gly Cys Lys Thr Asp Leu Arg Lys Asp
85 90 95
Lys Glu Gln Leu Arg Lys Leu Arg Ala Ala Gln Leu Glu Pro Ile Thr
100 105 110
Tyr Met Gln Gly Leu Ser Ala Cys Glu Gln Ile Arg Ala Ala Leu Tyr
115 120 125
Leu Glu Cys Ser Ala Lys Phe Arg Glu Asn Val Glu Asp Val Phe Arg
130 135 140
Glu Ala Ala Lys Val Ala Leu Ser Ala Leu Lys Lys Ala Gln Arg Gln
145 150 155 160
Lys Lys Arg Arg Leu Cys Leu Leu Leu
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<210> 5981
<211> 677
<212> DNA
<213> Homo sapiens

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<210> 5982
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 5982
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 35 40 45
 Asn Leu His Thr Leu Gly Gln Leu Lys Leu Ser Arg Arg Cys Arg Glu
 50 55 60
 Pro Arg Leu Gly Arg Ala Gly Gln Gln Arg Leu His Pro Arg Thr Arg
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 Gly Lys

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 <211> 790
 <212> DNA
 <213> Homo sapiens

<400> 5983
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<210> 5984

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5984

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Ser	Lys	Cys	Leu	Met	Gln	Asp	Asp	Thr	Arg	Gly	Met	Phe	Met	Glu	Thr
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Thr	Val	Asn	Asp	Asn	Leu	Ile	Asp	Gly	Asn	Cys	Thr	Pro	Gln	Asn	Pro
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185

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<211> 737

<212> DNA

<213> Homo sapiens

<400> 5985

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 737

<210> 5986

<211> 165

<212> PRT

<213> Homo sapiens

<400> 5986

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 35 40 45
 Gln His Val Asp Glu Ser Gly Leu Ser Leu Thr Leu Ala Lys Glu Gln
 50 55 60
 Ala Gln Ala Trp Lys Glu Val Arg Leu His Lys Thr Thr Trp Leu Arg
 65 70 75 80
 Ser Glu Ile Leu His Arg Val Ile Gln Glu Leu Leu Val Asp Tyr Tyr
 85 90 95
 Val Lys Ile Gln Asp Thr Asn Val Thr Ser Glu Asp Lys Lys Phe His

	100		105		110
Glu Thr Leu	Glu Gln Arg	Leu Leu Val Thr	Glu Leu Met Arg	Leu Leu	
	115		120		125
Gly Pro Ser	Gln Glu Arg	Glu Ile Pro Pro	Leu Leu Gly Leu	Glu Lys	
	130		135		140
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<210> 5987

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<212> DNA

<213> Homo sapiens

<400> 5987

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1140

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<210> 5988

<211> 216

<212> PRT

<213> Homo sapiens

<400> 5988

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			20					25					30		
Thr	Pro	Ser	Glu	Arg	Gly	Met	Thr	Tyr	Asp	Ala	Leu	His	Val	Phe	Asp
			35				40					45			
Trp	Ile	Lys	Ala	Arg	Ser	Gly	Asp	Asn	Pro	Val	Tyr	Ile	Trp	Gly	His
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Ser	Leu	Gly	Thr	Gly	Val	Ala	Thr	Ile	Trp	Cys	Gly	Ala	Ser	Val	Ser
65					70					75				80	
Glu	Thr	Pro	Pro	Asp	Ala	Leu	Ile	Leu	Glu	Ser	Pro	Phe	Thr	Asn	Ile
				85					90					95	
Arg	Glu	Glu	Ala	Lys	Ser	His	Pro	Phe	Ser	Val	Ile	Tyr	Arg	Tyr	Phe
			100					105					110		
Pro	Gly	Phe	Asp	Trp	Phe	Phe	Leu	Asp	Pro	Ile	Thr	Ser	Ser	Gly	Ile
		115					120					125			
Lys	Phe	Ala	Asn	Asp	Glu	Asn	Val	Lys	His	Ile	Ser	Cys	Pro	Leu	Leu
	130					135					140				
Ile	Leu	His	Ala	Glu	Asp	Asp	Pro	Val	Val	Pro	Phe	Gln	Leu	Gly	Arg
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Lys	Leu	Tyr	Ser	Ile	Ala	Ala	Pro	Ala	Arg	Ser	Phe	Arg	Asp	Phe	Lys
		165						170					175		
Val	Gln	Phe	Val	Pro	Phe	His	Ser	Asp	Leu	Gly	Tyr	Arg	His	Lys	Tyr
		180						185					190		
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<210> 5989

<211> 1583

<212> DNA

<213> Homo sapiens

<400> 5989

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<210> 5990
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 <212> PRT
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<400> 5990
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 35 40 45
 Val Asn Thr His Val Trp Thr Lys Ser Lys Phe Met Gly Met Ser Val
 50 55 60
 Gly Val Ser Met Ile Gly Gly Val Leu Arg Leu Leu Glu His Gly
 65 70 75 80
 Glu Glu Tyr Val Phe Thr Leu Pro Ser Ala Tyr Ala Arg Ser Ile Leu
 85 90 95
 Thr Ile Pro Trp Val Glu Leu Gly Gly Lys Val Ser Ile Asn Cys Ala
 100 105 110
 Lys Thr Gly Tyr Ser Ala Thr Val Ile Phe His Thr Lys Pro Phe Tyr
 115 120 125
 Gly Gly Lys Val His Arg Val Thr Ala Glu Val Lys His Asn Pro Thr
 130 135 140
 Asn Thr Ile Val Cys Lys Ala His Gly Glu Trp Asn Gly Thr Leu Glu
 145 150 155 160
 Phe Thr Tyr Asn Asn Gly Glu Thr Lys Val Ile Asp Thr Thr Thr Leu
 165 170 175
 Pro Val Tyr Pro Lys Lys Ile Arg Pro Leu Glu Lys Gln Gly Pro Met
 180 185 190
 Glu Ser Arg Asn Leu Trp Arg Glu Val Thr Arg Tyr Leu Arg Leu Gly
 195 200 205
 Asp Ile Asp Ala Ala Thr Glu Gln Lys Arg His Leu Glu Glu Lys Gln
 210 215 220
 Arg Val Glu Glu Arg Lys Arg Glu Asn Leu Arg Thr Pro Trp Lys Pro
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<210> 5992

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5992

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			20					25				30			
Val	Val	Phe	Asp	Glu	Ala	Asp	Arg	Leu	Phe	Glu	Met	Gly	Phe	Ala	Glu
		35				40				45					
Gln	Leu	Gln	Glu	Ile	Ile	Ala	Arg	Leu	Pro	Gly	Gly	His	Gln	Thr	Val
	50				55				60						
Leu	Phe	Ser	Ala	Thr	Leu	Pro	Lys	Leu	Leu	Val	Glu	Phe	Ala	Arg	Ala
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Gly	Leu	Thr	Glu	Pro	Val	Leu	Ile	Arg	Leu	Asp	Val	Asp	Thr	Lys	Leu
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			100					105				110			
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		115				120						125			
Gln	Thr	Val	Val	Phe	Val	Ala	Thr	Lys	His	His	Ala	Glu	Tyr	Leu	Thr
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Glu	Leu	Leu	Thr	Thr	Gln	Xaa	Val	Ser	Cys	Ala	His	Ile	Tyr	Ser	Ala
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			165					170					175		
Lys	Cys	Ser	Thr	Leu	Ile	Val	Thr	Asp	Leu	Ala	Ala	Arg	Gly	Leu	Asp
			180					185				190			
Ile	Pro	Leu	Leu	Asp	Asn	Val	Ile	Asn	Tyr	Ser	Phe	Pro	Ala	Lys	Gly

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225	230	235
Asp Leu His Leu Phe Leu Gly Arg Ser Leu Xaa Pro Arg Pro Thr Pro		
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Gln Gly Ala Leu Arg Cys Gly Arg Cys Gly Trp His Ala Gly Ser Gly		
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<210> 5993

<211> 7858

<212> DNA

<213> Homo sapiens

<400> 5993

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<212> PRT

<213> Homo sapiens

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Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn	Asn Cys Gln Thr Phe
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<212> PRT

<213> Homo sapiens

<400> 6002

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<213> Homo sapiens

<400> 6003

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<211> 140

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<213> Homo sapiens

<400> 6004

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<210> 6006

<211> 200

<212> PRT

<213> Homo sapiens

<400> 6006

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Lys	Gly	Gln	Lys	Gly	Asp	Pro	Gly	Glu	Pro	Gly	Pro	Ala	Gly	Leu	Lys
			20					25				30			
Gly	Glu	Ala	Gly	Glu	Met	Gly	Leu	Ser	Gly	Leu	Pro	Gly	Ala	Asp	Gly
			35				40					45			
Leu	Lys	Gly	Glu	Lys	Gly	Glu	Ser	Ala	Ser	Gln	Pro	Thr	Gly	Glu	Pro
			50				55				60				
Gly	Ser	Ala	His	Ser	Glu	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Pro
					70					75				80	
Gly	Pro	Met	Gly	Leu	Gln	Gly	Ile	Gln	Gly	Pro	Lys	Gly	Leu	Asp	Gly
					85					90				95	
Ala	Lys	Gly	Glu	Lys	Gly	Ala	Ser	Gly	Glu	Arg	Gly	Ser	Ser	Gly	Leu
					100					105				110	
Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Leu	Ile	Gly	Leu	Pro	Gly	Thr	Lys
					115					120				125	
Gly	Glu	Lys	Gly	Arg	Pro	Gly	Glu	Pro	Gly	Leu	Asp	Gly	Phe	Pro	Gly
					130					135				140	
Pro	Arg	Gly	Glu	Lys	Gly	Asp	Arg	Ser	Glu	Arg	Gly	Glu	Lys	Gly	Glu
					145					150				155	
Arg	Gly	Val	Pro	Gly	Arg	Lys	Gly	Val	Lys	Gly	Gln	Lys	Gly	Glu	Pro
					165					170				175	
Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
					180					185				190	
Pro	Val	Pro	Gly	Cys	Trp	His	Lys								
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<210> 6007

<211> 693

<212> DNA

<213> Homo sapiens

<400> 6007

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 693

<210> 6008

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6008

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 Gly Lys Met Val Lys Lys Val Cys Pro Cys Asn Gln Leu Cys Arg Thr
 35 40 45
 Ser Ser Thr Asn Thr Val Gly Ala Thr Val Asn Ser Gln Ala Ala Gln
 50 55 60
 Ala Gln Pro Pro Ala Met Thr Ser Ser Arg Lys Gly Thr Phe Thr Asp
 65 70 75 80
 Asp Leu His Lys Leu Val Asp Asn Trp Ala Arg Asp Ala Met Asn Leu
 85 90 95
 Ser Gly Arg Arg Gly Ser Lys Gly His Met Asn Tyr Glu Gly Pro Gly
 100 105 110
 Met Ala Arg Lys Phe Ser Ala Pro Gly Gln Leu Cys Ile Ser Met Thr
 115 120 125
 Ser Asn Leu Gly Gly Ser Ala Pro Ile Ser Ala Ala Ser Ala Thr Ser
 130 135 140
 Leu Gly His Phe Thr Lys Ser Met Cys Pro Pro Gln Gln Tyr Gly Phe
 145 150 155 160
 Pro Ala Thr Pro Phe Gly Ala Gln Trp Ser Gly Thr Gly Gly Pro Ala

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 1380
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 1440
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<210> 6010

<211> 468

<212> PRT

<213> Homo sapiens

<400> 6010

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Asp	Thr	Val	Tyr	Asp	Val	Val	Val	Ser	Gly	Gly	Gly	Leu	Val	Gly	Ala	35	40	45	
Ala	Met	Ala	Cys	Ala	Leu	Gly	Tyr	Asp	Ile	His	Phe	His	Asp	Lys	Lys	50	55	60	
Ile	Leu	Leu	Leu	Glu	Ala	Gly	Pro	Lys	Lys	Val	Leu	Glu	Lys	Leu	Ser	65	70	75	80
Glu	Thr	Tyr	Ser	Asn	Arg	Val	Ser	Ser	Ile	Ser	Pro	Gly	Ser	Ala	Thr	85	90	95	
Leu	Leu	Ser	Ser	Phe	Gly	Ala	Trp	Asp	His	Ile	Cys	Asn	Met	Arg	Tyr	100	105	110	
Arg	Ala	Phe	Arg	Arg	Met	Gln	Val	Trp	Asp	Ala	Cys	Ser	Glu	Ala	Leu	115	120	125	
Ile	Met	Phe	Asp	Lys	Asp	Asn	Leu	Asp	Asp	Met	Gly	Tyr	Ile	Val	Glu	130	135	140	
Asn	Asp	Val	Ile	Met	His	Ala	Leu	Thr	Lys	Gln	Leu	Glu	Ala	Val	Ser	145	150	155	160
Asp	Arg	Val	Thr	Val	Leu	Tyr	Arg	Ser	Lys	Ala	Ile	Arg	Tyr	Thr	Trp	165	170	175	
Pro	Cys	Pro	Phe	Pro	Met	Ala	Asp	Ser	Ser	Pro	Trp	Val	His	Ile	Thr	180	185	190	
Leu	Gly	Asp	Gly	Ser	Thr	Phe	Gln	Thr	Lys	Leu	Leu	Ile	Gly	Ala	Asp	195	200	205	
Gly	His	Asn	Ser	Gly	Val	Arg	Gln	Ala	Val	Gly	Ile	Gln	Asn	Val	Ser	210	215	220	
Trp	Asn	Tyr	Asp	Gln	Ser	Ala	Val	Val	Ala	Thr	Leu	His	Leu	Ser	Glu	225	230	235	240
Ala	Thr	Glu	Asn	Asn	Val	Ala	Trp	Gln	Arg	Phe	Leu	Pro	Ser	Gly	Pro	245	250	255	
Ile	Ala	Leu	Leu	Pro	Leu	Ser	Asp	Thr	Leu	Ser	Ser	Leu	Val	Trp	Ser				

260 265 270
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 275 280 285
 Phe Val Asp Ala Val Asn Ser Ala Phe Trp Ser Asp Ala Asp His Thr
 290 295 300
 Asp Phe Ile Asp Thr Ala Gly Ala Met Leu Gln Tyr Pro Val Ser Leu
 305 310 315 320
 Leu Lys Pro Thr Lys Val Ser Ala Arg Gln Leu Pro Pro Ser Val Pro
 325 330 335
 Trp Val Asp Ala Lys Ser Arg Val Leu Phe Pro Leu Gly Leu Gly His
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 Ala Ala Glu Tyr Val Arg Pro Arg Val Ala Leu Ile Gly Asp Ala Ala
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 His Arg Val His Pro Leu Ala Gly Gln Gly Val Asn Met Gly Phe Gly
 370 375 380
 Asp Ile Ser Ser Leu Ala His His Leu Ser Thr Ala Ala Phe Asn Gly
 385 390 395 400
 Lys Asp Leu Gly Ser Val Ser His Leu Thr Gly Tyr Glu Thr Glu Arg
 405 410 415
 Gln Arg His Asn Thr Ala Leu Leu Ala Ala Thr Asp Leu Leu Lys Arg
 420 425 430
 Leu Tyr Ser Thr Ser Ala Ser Pro Leu Val Leu Leu Arg Thr Trp Gly
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 Phe Ala Ser Lys
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<210> 6011
 <211> 1331
 <212> DNA
 <213> Homo sapiens

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<210> 6012

<211> 219

<212> PRT

<213> Homo sapiens

<400> 6012

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Val	Phe	Ser	Lys	Gly	Val	Arg	Glu	Val	Glu	Arg	Val	Leu	Gln	Leu	Pro
			20					25					30		
Lys	Glu	Pro	Gly	Asp	Ser	Ala	Gln	Phe	Thr	Lys	Ala	Ile	Ala	Ile	Ile
			35				40					45			
Phe	Pro	Phe	Leu	Tyr	Leu	Leu	Glu	Lys	Val	Glu	Cys	Thr	Pro	Ser	Gln
			50				55				60				
Glu	His	Leu	Lys	His	Gln	Thr	Val	Tyr	Arg	Leu	Leu	Lys	Cys	Ala	Pro
					70				75					80	
Arg	Gly	Lys	Asn	Gly	Phe	Thr	Pro	Leu	His	Met	Ala	Val	Asp	Lys	Asp
			85						90					95	
Thr	Thr	Asn	Val	Gly	Arg	Tyr	Pro	Val	Gly	Arg	Phe	Pro	Ser	Leu	His
			100						105					110	
Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
			115					120					125		
Phe	Asp	Asn	Asn	Thr	Pro	Leu	His	Ile	Ala	Ala	Gln	Asn	Asn	Cys	Pro
Ala	Ile	Met	Asn	Ala	Leu	Ile	Glu	Ala	Gly	Ala	His	Met	Asp	Ala	Thr
Asn	Ala	Phe	Lys	Lys	Thr	Ala	Tyr	Glu	Leu	Leu	Asp	Glu	Lys	Leu	Leu

	165		170		175										
Ala	Arg	Gly	Thr	Met	Gln	Pro	Phe	Asn	Tyr	Val	Thr	Leu	Gln	Cys	Leu
	180		185		190										
Ala	Ala	Arg	Ala	Leu	Asp	Lys	Asn	Lys	Ile	Pro	Tyr	Lys	Gly	Phe	Ile
	195		200		205										
Pro	Glu	Asp	Leu	Glu	Ala	Phe	Ile	Glu	Leu	His					
	210		215												

<210> 6013

<211> 2204

<212> DNA

<213> Homo sapiens

<400> 6013

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 180
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<210> 6014

<211> 182

<212> PRT

<213> Homo sapiens

<400> 6014

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Ala	Tyr	Thr	Asp	Ala	Ala	Ser	Leu	Glu	Val	His	Leu	Ser	Thr	His	Thr
			20					25					30		
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
			35				40					45			
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
		50				55					60				
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala
65					70				75					80	
Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
				85				90						95	
Gln	Ala	Gln	Ala	Gln	Ala	Ser	Gln	Ala	Ser	Gln	Gln	Gln	Gln	Gln	Gln

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      115      120      125
Pro Gly Ala Ala Pro Gln Gly Gly Gly Gly Asp Ser Asn Pro Asn
      130      135      140
Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu
145      150      155      160
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<210> 6015
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 <212> DNA
 <213> Homo sapiens

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240
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420
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480
gccagtgaga gaacagtcac acgataaagg cacagcacag cagttggttg tctcttttta
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612

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<210> 6016
 <211> 99
 <212> PRT
 <213> Homo sapiens

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<400> 6016
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Pro Arg Ser Pro Glu Arg Leu Pro Ala Ser Gln Gly Ile Ser Arg Gly
20      25      30
Arg Cys Lys Leu Asn Asn Asn Ser Trp Ser Gly Leu Thr Cys Pro Thr
35      40      45
Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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50		55		60
Ser His Gly Ser Ser Leu Pro Phe Asn Gln Asp Ser Gln Lys Pro Ala				
65		70		75
Phe Tyr Asn Ile Phe Leu Lys Lys Ser His Ser Phe Gln Ser Leu Leu				80
	85		90	95
Gln Tyr Ile				

<210> 6017
 <211> 2091
 <212> DNA
 <213> Homo sapiens

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 120
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<211> 537

<212> PRT

<213> Homo sapiens

<400> 6018

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<211> 3002

<212> DNA

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<400> 6019

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 <213> Homo sapiens

<400> 6020

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His Pro Leu Phe Glu Gly Gly Ile Cys Ala Pro Cys Lys Asp Lys Phe
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Leu Asp Ala Leu Phe Leu Tyr Asp Asp Asp Gly Tyr Gln Ser Tyr Cys
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Ser Ile Cys Cys Ser Gly Glu Thr Leu Leu Ile Cys Gly Asn Pro Asp
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Cys Thr Arg Cys Tyr Cys Phe Glu Cys Val Asp Ser Leu Val Gly Pro
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<211> 1014

<212> DNA

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 <212> PRT
 <213> Homo sapiens

<400> 6024
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<211> 496

<212> PRT

<213> Homo sapiens

<400> 6026

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Glu Asp Arg Arg Leu Gln Pro Ser Thr Pro Glu Lys Lys Gly Leu Phe			
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Leu Arg Ser Pro Arg Lys Pro Thr Arg Lys Ile Ser Lys Ile Pro Phe			
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Lys Val Leu Asp Ala Pro Glu Leu Gln Asp Asp Phe Tyr Leu Asn Leu			
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Val Asp Trp Ser Ser Leu Asn Val Leu Ser Val Gly Leu Gly Thr Cys			
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Val Tyr Leu Trp Ser Ala Cys Thr Ser Gln Val Thr Arg Leu Cys Asp			
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Arg Val Gly Ala Leu Ala Trp Asn Ala Glu Gln Leu Ser Ser Gly Ser			
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Glu His Leu Ala Ala Val Lys Ala Ile Ala Trp Ser Pro His Gln His			
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Gly Leu Leu Ala Ser Gly Gly Gly Thr Ala Asp Arg Cys Ile Arg Phe			
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Trp Asn Thr Leu Thr Gly Gln Pro Leu Gln Cys Ile Asp Thr Gly Ser			
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Gln Val Cys Asn Leu Ala Trp Ser Lys His Ala Asn Glu Leu Val Ser			
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Thr His Gly Tyr Ser Gln Asn Gln Ile Leu Val Trp Lys Tyr Pro Ser			
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<211> 305

<212> DNA

<213> Homo sapiens

<400> 6027

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 His Thr Gly Thr Ser His Pro Pro Arg Phe Gly Leu Ala Glu Thr Ser

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Phe His Ser Ser Lys Ala Ser Met Val Phe Ala Ser Pro Gln Glu Val
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Ser Gln Glu Glu Phe Leu Asp Gly Val Leu Met Ser Ala Glu Asn Ser
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<211> 1316

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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2760
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2880
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 3660
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 3720
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 3910

<210> 6038

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

Lys Gln Pro Xaa Arg Ser Leu Ala Pro Ala Leu Pro Gly Ala Leu Ser
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 Ile Thr Ala Leu Cys Thr Ala Leu Ala Glu Pro Ala Trp Leu His Ile
 20 25 30
 His Gly Gly Thr Cys Ser Arg Gln Glu Leu Gly Val Ser Asp Val Leu
 35 40 45
 Gly Tyr Val His Pro Asp Leu Leu Lys Asp Phe Cys Met Asn Pro Gln
 50 55 60
 Thr Val Leu Leu Leu Arg Val Ile Ala Ala Phe Cys Phe Leu Gly Ile
 65 70 75 80
 Leu Cys Ser Leu Ser Ala Phe Leu Leu Asp Val Phe Gly Pro Lys His
 85 90 95
 Pro Ala Leu Lys Ile Thr Arg Arg Tyr Ala Phe Ala His Ile Leu Thr
 100 105 110
 Val Leu Gln Cys Ala Thr Val Ile Gly Phe Ser Tyr Trp Ala Ser Glu
 115 120 125
 Leu Ile Leu Ala Gln Gln Gln Gln His Lys Lys Tyr His Gly Ser Gln
 130 135 140
 Val Tyr Val Thr Phe Ala Val Ser Phe Tyr Leu Val Ala Gly Ala Gly
 145 150 155 160
 Gly Ala Ser Ile Leu Ala Thr Ala Ala Asn Leu Leu Arg His Tyr Pro
 165 170 175
 Thr Glu Glu Glu Glu Gln Ala Leu Glu Leu Leu Ser Glu Met Glu Glu
 180 185 190
 Asn Glu Pro Tyr Pro Ala Glu Tyr Glu Val Ile Asn Gln Phe Gln Pro
 195 200 205
 Pro Pro Ala Tyr Thr Pro
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<210> 6039
 <211> 1130
 <212> DNA
 <213> Homo sapiens

<400> 6039
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 120
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 240
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 420
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 480
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 720
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 780
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 840
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 900
 aacacctacg tgtatgctgt ggagaaaagg aagagctgac atgtgtacgt atatgtatat
 960
 gcaacacctg tgagaccccc attcaggta aggaaaacca ttgcctgcac cccaagggcc
 1020
 ccatatttgc ccctcccat cacagtctg cccttcaccc tcaagcacgg tcctaaactt
 1080
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 1130

<210> 6040
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 6040
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 1 5 10 15
 Gly Leu Leu Ala Val Leu Arg Ala Gly Pro Gly Pro Glu Ala Leu Leu

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Gln Val Trp Ala Ala Glu Ser Ala Leu Arg Gly Glu Pro Leu Trp Ala
  35      40      45
Gln Asn Val Val Pro Glu Ala Glu Gly Glu Asp Asp Pro Ala Gly Glu
  50      55      60
Ala Gln Ala Gly Arg Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val
  65      70      75      80
Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala
  85      90      95
Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala
  100      105      110
Gly Gln Val Phe Ser Trp Gly Gly Gly Arg His Gly Gln Leu Gly His
  115      120      125
Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln
  130      135      140
Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys
  145      150      155      160
Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly
  165      170      175
Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val
  180      185      190
Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg
  195      200      205
Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln
  210      215      220
Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys
  225      230      235      240
Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu
  245      250      255
Leu Tyr Thr Trp Gly Trp Gly Lys Tyr Gly Gln Leu Gly His Glu Asp
  260      265      270
Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys
  275      280      285
Gln Leu Gln Val Lys Ala Val Thr Cys Gly Pro Trp Asn Thr Tyr Val
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Tyr Ala Val Glu Lys Gly Lys Ser
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<210> 6041

<211> 291

<212> DNA

<213> Homo sapiens

<400> 6041

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120

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cggttggagc agcaaaagca gcagataatg gcagctttaa actcccagac tgccgtgcag
180

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ttccagcagt atgcagccca acagtatcca gggaactacg aacagcagca aattctcatc
240

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cgccagttgc aggagcaaca ctatcagcag tacatgcagc agttgtatca c
291

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<210> 6042
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 6042
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 Arg Arg Arg Glu Glu Glu Arg Leu Arg Arg Glu Glu Glu Arg
 20 25 30
 Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu Gln Gln Lys Gln Gln
 35 40 45
 Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr
 50 55 60
 Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile
 65 70 75 80
 Arg Gln Leu Gln Glu Gln His Tyr Gln Gln Tyr Met Gln Gln Leu Tyr
 85 90 95
 His

<210> 6043
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 6043
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 120
 ttcaagggtgt cttgtacaac ccaactgggga aacaggatct gggaccgggtg cgggcacatt
 180
 ctccctggccc agcacagggg cgggtgccacc cacattcggc ccgggtcttg cctaatacat
 240
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 300
 ggaateccaca cccccgcccc acccctctcg ggacacggat tcaatgtccc tgggtgggtca
 360
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 420
 tgttctcccc cgctcgacgtt gctcagataa cagtcctgca attccatggg ggtggcgga
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 558

<210> 6044
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 6044

Met Leu Cys Gln Thr Pro Gly Ala Ala Thr Pro Met Glu Leu Gln Asp
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 Cys Tyr Leu Ser Asn Val Asp Gly Gly Glu His Pro Cys Pro Arg Leu
 20 25 30
 Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
 35 40 45
 Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
 50 55 60
 Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
 65 70 75 80
 Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
 85 90 95
 Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
 100 105 110
 Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
 115 120 125
 Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser
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 Thr Leu Cys Leu Asp Ile Ser Tyr
 145 150

<210> 6045

<211> 1916

<212> DNA

<213> Homo sapiens

<400> 6045

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 420
 agcagtaact tggtaattct gtctggccaa gtggttgaac actttgatct ggagttccga
 480
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 720
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gctgccactc aaacagagcc aggagaggag atgccagggc tgagtgtgag tgagggtggga
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 1916

<210> 6046

<211> 457

<212> PRT

<213> Homo sapiens

<400> 6046

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Pro	Tyr	Gly	Cys	Lys	Asp	Ala	Leu	Arg	Gln	Gln	Leu	Arg	Ser	Ala	Arg
			20					25					30		
Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
		35				40					45				
Arg	Asp	Leu	Gln	Glu	Ile	Cys	Arg	Lys	Gln	Gly	Val	Ala	Val	Tyr	Ile
	50					55					60				
Leu	Leu	Asp	Gln	Ala	Leu	Leu	Ser	Gln	Phe	Leu	Asp	Met	Cys	Met	Asp


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65          70          75          80
Leu Lys Val His Pro Glu Gln Glu Lys Leu Met Thr Val Arg Thr Ile
      85          90          95
Thr Gly Asn Ile Tyr Ala Arg Ser Gly Thr Lys Ile Ile Gly Lys
      100         105         110
Val His Glu Lys Phe Thr Leu Ile Asp Gly Ile Arg Val Ala Thr Gly
      115         120         125
Ser Tyr Ser Phe Thr Trp Thr Asp Gly Lys Leu Asn Ser Ser Asn Leu
      130         135         140
Val Ile Leu Ser Gly Gln Val Val Glu His Phe Asp Leu Glu Phe Arg
145         150         155         160
Ile Leu Tyr Ala Gln Ser Lys Pro Ile Ser Pro Lys Leu Leu Ser His
      165         170         175
Phe Gln Ser Ser Asn Lys Phe Asp His Leu Thr Asn Arg Lys Pro Gln
      180         185         190
Ser Lys Glu Leu Thr Leu Gly Asn Leu Leu Arg Met Arg Leu Ala Arg
      195         200         205
Leu Ser Ser Thr Pro Arg Lys Ala Asp Leu Asp Pro Glu Met Pro Ala
      210         215         220
Glu Gly Lys Ala Glu Arg Lys Pro His Asp Cys Glu Ser Ser Thr Val
225         230         235         240
Ser Glu Glu Asp Tyr Phe Ser Ser His Arg Asp Glu Leu Gln Ser Arg
      245         250         255
Lys Ala Ile Asp Ala Ala Thr Gln Thr Glu Pro Gly Glu Glu Met Pro
      260         265         270
Gly Leu Ser Val Ser Glu Val Gly Thr Gln Thr Ser Ile Thr Thr Ala
      275         280         285
Cys Ala Gly Thr Gln Thr Ala Val Ile Thr Arg Ile Ala Ser Ser Gln
      290         295         300
Thr Thr Ile Trp Ser Arg Ser Thr Thr Thr Gln Thr Asp Met Asp Glu
305         310         315         320
Asn Ile Leu Phe Pro Arg Gly Thr Gln Ser Thr Glu Gly Ser Pro Val
      325         330         335
Ser Lys Met Ser Val Ser Arg Ser Ser Ser Leu Lys Ser Ser Ser Ser
      340         345         350
Val Ser Ser Gln Gly Ser Val Ala Ser Ser Thr Gly Ser Pro Ala Ser
      355         360         365
Ile Arg Thr Thr Asp Phe His Asn Pro Gly Tyr Pro Lys Tyr Leu Gly
      370         375         380
Thr Pro His Leu Glu Leu Tyr Leu Ser Asp Ser Leu Arg Asn Leu Asn
385         390         395         400
Lys Glu Arg Gln Phe His Phe Ala Gly Ile Arg Ser Arg Leu Asn His
      405         410         415
Met Leu Ala Met Leu Ser Arg Arg Thr Leu Phe Thr Glu Asn His Leu
      420         425         430
Gly Leu His Ser Gly Asn Phe Ser Arg Val Asn Leu Leu Ala Val Arg
      435         440         445
Asp Val Ala Leu Tyr Pro Ser Tyr Gln
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<210> 6047

<211> 773

<212> DNA

<213> Homo sapiens

<400> 6047
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 360
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<210> 6048
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 6048
 Met Val Lys Arg Val Ser Glu Met Ser Asp Lys Lys Gln Leu Arg Ser
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 Arg Ser Cys Arg Pro Pro Gly Ser Ser Ser Gly Ser Pro Ser Ser Thr
 20 25 30
 Gly Thr Thr Leu Glu Lys Ser Cys Leu His His Cys Ser Gly Gly Gly
 35 40 45
 His Leu Pro Ser Ala Cys Leu Gly Ala Arg Arg Ser Ser Ser Leu Leu
 50 55 60
 Gly Tyr Gly Ser Cys Arg Asp Thr Gln Ser Trp Thr Pro Asp Pro Leu
 65 70 75 80
 Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala
 85 90 95
 Met Arg Ser Pro Ile Ser His Gln Glu Leu Thr Arg Pro Leu Gly Lys
 100 105 110
 Glu Ala Ala Arg Arg Arg Cys Gly His Thr Val Ala Leu Ser Ala Arg
 115 120 125
 Asp

<210> 6049
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 6049
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 120
 agcagcagta gcagcagtaa cagtagtaac gagagagaag actttgattc cacctcttcc
 180
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 240
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 300
 gaagacaccc tggagtgtgt agggtttgat gcgaagatgg ctgaggaatc ctctctctcc
 360
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 420
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 479

<210> 6050
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 6050
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 20 25 30
 Ala Lys Lys Arg Lys Leu Asn Ser Ser Ser Ser Ser Asn Ser
 35 40 45
 Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Thr
 50 55 60
 Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe
 65 70 75 80
 Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys
 85 90 95
 Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys
 100 105 110
 Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala
 115 120 125
 Ala Thr Ser Gln Glu Gln Gln Leu Lys Asn Lys Ser Ile Leu Ile Ser
 130 135 140
 Ser Val Gly Ser Val His His Ala Asp Gly Leu Ala Glu Ser Ser
 145 150 155

<210> 6051
 <211> 2404
 <212> DNA
 <213> Homo sapiens

<400> 6051
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240
cgctaccagg aagttttagt gcaacgtagc aagcgcacac agttagaaga gattcaacag
300
aaggtaatgc aggtggtgaa ctggctagaa gggcctggat cagaacaact aagagcccag
360
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420
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660
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<211> 518

<212> PRT

<213> Homo sapiens

<400> 6052

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 <211> 3257
 <212> DNA
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 <212> PRT
 <213> Homo sapiens

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 Gly Thr Cys Thr Leu Phe Phe Ala Phe Glu Cys Arg Tyr Leu Ala Val
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<211> 285

<212> PRT

<213> Homo sapiens

<400> 6056

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<212> DNA

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<212> PRT

<213> Homo sapiens

<400> 6058

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<210> 6059

<211> 1442

<212> DNA

<213> Homo sapiens

<400> 6059

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<210> 6060
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 Val Leu Lys Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr
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<212> DNA

<213> Homo sapiens

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<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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		115				120						125			
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<210> 6063

<211> 2286

<212> DNA

<213> Homo sapiens

<400> 6063

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<212> PRT

<213> Homo sapiens

<400> 6064

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Lys	Lys	Ile	Leu	Phe	Tyr	Cys	His	Phe	Pro	Asp	Leu	Leu	Leu	Thr	Lys

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Phe Thr Ala Ala Val Phe Lys Glu Thr Phe Lys Ser Leu Ser His Ile
          195          200          205
Asp Pro Asp Val Leu Tyr Pro Ser Leu Asn Val Thr Ser Phe Asp Ser
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<213> Homo sapiens

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<211> 80

<212> PRT

<213> Homo sapiens

<400> 6066

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<211> 406

<212> DNA

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<213> Homo sapiens

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<213> Homo sapiens

<400> 6069

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 Gln His Leu Arg Lys Gly Lys Ala Thr Arg Val Gly Gly Glu Pro Gly
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<211> 601

<212> PRT

<213> Homo sapiens

<400> 6076

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Arg	Ser	Lys	Ile	Ala	Glu	Thr	Phe	Gly	Leu	Gln	Glu	Asn	Tyr	Ile	Lys
			115				120					125			
Ile	Val	Ile	Asn	Lys	Lys	Gln	Leu	Gln	Leu	Gly	Lys	Thr	Leu	Glu	Glu
			130			135				140					
Gln	Gly	Val	Ala	His	Asn	Val	Lys	Ala	Met	Val	Leu	Glu	Leu	Lys	Gln
			145		150				155					160	
Ser	Glu	Glu	Asp	Ala	Arg	Lys	Asn	Phe	Gln	Leu	Glu	Glu	Glu	Glu	Gln

	165		170		175
Asn	Glu	Ala	Lys	Leu	Lys
	180		185		190
Leu	Glu	Ile	Leu	Ala	Lys
	195		200		205
Met	Thr	Pro	Tyr	Leu	Asp
	210		215		220
Ile	Pro	Pro	Ser	Glu	Arg
	225		230		235
Glu	Lys	Gly	Arg	Ala	Phe
	245		250		255
Pro	Cys	Leu	Leu	Asp	Ala
	260		265		270
Leu	Leu	Asp	Thr	Val	Asp
	275		280		285
Trp	Cys	Tyr	Phe	Arg	Leu
	290		295		300
Lys	Lys	Leu	Asn	Leu	Ala
	305		310		315
Asn	His	Gln	Arg	Leu	Val
	325		330		335
Val	Leu	Phe	Leu	Arg	Leu
	340		345		350
Ser	Gly	Asn	Asp	Val	Glu
	355		360		365
Ser	Leu	Lys	Ser	Tyr	Ile
	370		375		380
Ser	Trp	Gly	Leu	Leu	Pro
	385		390		395
Asp	Gly	Asn	Val	Asp	His
	405		410		415
Glu	Leu	Ala	Gln	Ile	Arg
	420		425		430
Leu	Glu	Asn	Ile	Arg	Phe
	435		440		445
Ala	Gln	Gln	Ile	Leu	Leu
	450		455		460
Ser	Asn	Pro	Glu	Thr	Asp
	465		470		475
Ile	Asp	Arg	Leu	Val	Tyr
	485		490		495
Ala	Leu	Arg	Val	Phe	Arg
	500		505		510
Ala	His	Asn	Gly	Gly	Ser
	515		520		525
Asp	Ser	Leu	Ser	Pro	Pro
	530		535		540
Ser	Ser	Ala	Ser	Thr	Asp
	545		550		555
Ile	Leu	Glu	Asp	Ile	Pro
	565		570		575
Leu	Glu	Asp	Glu	Glu	Ile
	580		585		590
Asn	Arg	Lys	Ser	Ala	Thr

595

600

<210> 6077

<211> 2093

<212> DNA

<213> Homo sapiens

<400> 6077

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60

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120

ccggggggtg ggccgcacat ttacgtgctg gaagcggagg accgggagct ggtgacgatg

180

gcggggccgc agccccctggc gctgcaactg gaacagtgtg tgaaccccg accaagcgag

240

gcgggacctg aagcggaccc cgagggaagcc actgctgcca ggggtgattga cagggttgat

300

gaagggaag atgggaagg tgatttccta gtagtgggta gcattagaaa actggcatca

360

gcctccctct tggacacgga caaaaggatg tgccgcaaaa ccacctctag aaaagcatgg

420

aatgaagacc attgggagca gactctgcca ggatcgtctg atgaggaaat atctgatgag

480

gaagggtctg gagatgaaga ttcagaggga ctgggtctgg aggaatatga tgaggacgac

540

ctgggtgctg ctgaggaaca ggagtgtggt gatcagggag agcaagaaga cgagaagcca

600

ctctgcaaaa acaccgggct tcagtgtcca gagtatcagt gactttgaga aatttaccaa

660

gggaatggat gacctgggag cagtgaggag gaggaagacg aagagagtgg catggaagaa

720

ggggatgacg cggaagactc ccaaggcgag agtgagggaag acagggctgg agatagaaac

780

agtgaggatg atgggtgtgt gatgaccttc tctagtgtca aagtttctga ggaagtggag

840

aaaggaagag ccgtgaagaa ccagatagca ctgtgggacc agctcttga aggaaggatc

900

aaactacaaa aagctctgtt gaccaccaac cagcttcctc aaccagatgt tttccattg

960

ttcaaggaca aagggtggcc agaattttcc agtgccctga aaaatagtca caaggcactt

1020

aaagcattgt tgaggtcatt ggtaggtctt caggaagagt tgcttttcca gtaccagac

1080

actagatata tagtagatgg gacaaagccc aatgcgggaa gtgaggagat ttctagttaa

1140

gatgatgagc tggtagaaga gaagaagcag caacgaagaa gggcccctgc aaagaggaag

1200

ctggagatgg aggactatcc cagcttcagt gcaaagcgct ttgccgactt tacagtctac

1260

aggaaccgca cacttcagaa atggcacgat aagaccaaac tggcttctgg aaaactgggg

1320

aagggttttg gtgcctttga acgctcaatc ttgactcaga tcgaccatat tctgatggac

1380

5260

aaagagagat tacttcgaag gacacagacc aagcgctctg tctatcgagt tcttgga
 1440
 cctgagccag cagctcagcc tgtcccagag agtttgccag gggaaccgga gatccttcct
 1500
 caagcccctg ctaatgctca tctgaaggac ttggatgaag aaatctttga tgatgatgac
 1560
 ttttaccacc agctccttcg agaactcata gaacggaaga ccagctcctt ggatcccaac
 1620
 gatcaggtgg ccatgggaag gcagtggctt gcaatccaga agttacgaag caaaatccac
 1680
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 1740
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 1800
 ctgtaccgct ctctttttgg ccagctccac cctcccacg aaggccacgg ggattgacat
 1860
 cgcccacctc cgacacccag tgggcgcctt ggctggtgct gctgctgggc cagatggagg
 1920
 aaaccagtga ctttatgggg ctgagctagt agggaagccc ctggaaagat gctgcgttcc
 1980
 gaacctgtgc ctaatacacg caagggcgct gtcccgccca accccgcctt taaacgccac
 2040
 aaataaagag cattgttacc gccaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa
 2093

<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

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Leu	Arg	Ala	Val	Ser	Gly	Gly	Ser	Gly	Asn	Arg	Ile	Lys	Ala	Arg	Gly
			20					25					30		
Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
			35				40					45			
Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
			50			55				60					
Pro	Leu	Ala	Leu	Gln	Leu	Gln	Leu	Leu	Asn	Pro	Arg	Pro	Ser	Glu	
65				70					75					80	
Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
			85						90				95		
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
			100				105					110			
Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
			115				120					125			
Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
			130				135				140				
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
145				150					155					160	
Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
			165						170				175		
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

180 185 190
 Gly Glu Gln Glu Asp Glu Lys Pro Leu Cys Lys Asn Thr Gly Leu Gln
 195 200 205
 Cys Pro Glu Tyr Gln
 210

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<210> 6079
<211> 651
<212> DNA
<213> Homo sapiens
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<400> 6079
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120
catgcgcagc ggggccgtgg gtgtacgcgg cgcagcgcgg cagtcttgat ggcccgcat
180
gggttacgcg tgcctgccct gctgtcgctc ctggtcggcg cgtggctcaa gctaggaaat
240
ggacaggcta ctagcatggt ccaactgcag ggtgggagat tcctgatggg aacaaattct
300
ccagacagca gagatgggta agggcctgtg cgggaggcga cagtgaaac ctttgccatc
360
gacatatttc ctgtcaccaa caaagatttc agggattttg tcaggggagaa aaagtatcgg
420
acagaagctg agatgtttgg atggagcttt gtctttgagg actttgtctc tgatgagctg
480
agaacaaag ccaccagcc aatgaagtct gtactctggt ggcttcagt ggaaaaggca
540
ttttggaggc agcctgcagg tcctggctct ggcatccgag agagactgga gcaccagtg
600
ttacacgtga gctggaatga cgcccgctgc tactgtgctt ggcggggaaa a
651

```

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<210> 6080
<211> 162
<212> PRT
<213> Homo sapiens
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<400>	6080														
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1				5					10					15	
Val	Gly	Ala	Trp	Leu	Lys	Leu	Gly	Asn	Gly	Gln	Ala	Thr	Ser	Met	Val
			20					25					30		
Gln	Leu	Gln	Gly	Gly	Arg	Phe	Leu	Met	Gly	Thr	Asn	Ser	Pro	Asp	Ser
			35				40					45			
Arg	Asp	Gly	Glu	Gly	Pro	Val	Arg	Glu	Ala	Thr	Val	Lys	Pro	Phe	Ala
	50					55				60					
Ile	Asp	Ile	Phe	Pro	Val	Thr	Asn	Lys	Asp	Phe	Arg	Asp	Phe	Val	Arg
65					70					75					80
Glu	Lys	Lys	Tyr	Arg	Thr	Glu	Ala	Glu	Met	Phe	Gly	Trp	Ser	Phe	Val
				85					90					95	
Phe	Glu	Asp	Phe	Val	Ser	Asp	Glu	Leu	Arg	Asn	Lys	Ala	Thr	Gln	Pro

```

      100      105      110
Met Lys Ser Val Leu Trp Trp Leu Pro Val Glu Lys Ala Phe Trp Arg
      115      120      125
Gln Pro Ala Gly Pro Gly Ser Gly Ile Arg Glu Arg Leu Glu His Pro
      130      135      140
Val Leu His Val Ser Trp Asn Asp Ala Arg Ala Tyr Cys Ala Trp Arg
      145      150      155      160
Gly Lys

```

<210> 6081
 <211> 655
 <212> DNA
 <213> Homo sapiens

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<400> 6081
gataatgac aggaacctcc ctattcaatg ataacattac acgaaatggc agaaacagat
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gaaggatggt tggatgttgt ccagtcttta attagagtta ttccactgga agatccactg
120
ggaccagctg ttataacatt gttactagat gaatgtccat tgcccactaa agatgcactc
180
cagaaaattga ctgaaattct caatttaa at ggagaagtag cttgccagga ctcaagccat
240
cctgccaaac acaggaacac atctgcagtc ctaggctgct tggccgagaa actagcaggt
300
cctgcaagta taggtttact tagcccagga atactggaat acttgctaca gtgtctgaag
360
ttacagtccc accccacagt catgcttttt gcacttatcg cactggaaaa gtttgcacag
420
acaagtga aaatattgac tttttctgaa tccagtatta gtgaccggct tgtcacattg
480
gagtcctggg ctaatgatcc tgattatctg aaacgtcaag ttggtttctg tgcccagtgg
540
agcttagaca atctcttttt aaaagaaggt agacagctga cctatgagaa agtgaacttg
600
agtagcatta gggccatgct gaatagcaat gatgtcagcg agtacctgaa gatct
655

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<210> 6082
 <211> 218
 <212> PRT
 <213> Homo sapiens

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<400> 6082
Asp Asn Asp Gln Glu Pro Pro Tyr Ser Met Ile Thr Leu His Glu Met
1      5      10      15
Ala Glu Thr Asp Glu Gly Trp Leu Asp Val Val Gln Ser Leu Ile Arg
20      25      30
Val Ile Pro Leu Glu Asp Pro Leu Gly Pro Ala Val Ile Thr Leu Leu
35      40      45
Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln Lys Leu Thr
50      55      60
Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp Ser Ser His

```

```

65          70          75          80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu
      85          90          95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
      100         105         110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
      115         120         125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
      130         135         140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
      145         150         155         160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
      165         170         175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
      180         185         190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
      195         200         205
Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
      210         215

```

<210> 6083

<211> 358

<212> DNA

<213> Homo sapiens

<400> 6083

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nnacgcgtga ggggacaggc tgagaaaaaa gaattacgac ataaaataga tgaaatggaa
60
gaaaaagaac aggagctcca ggcaaaaata gaagctttgc aagctgataa tgatttcacc
120
aatgaaagc taacagctttt acaagagaag ctgatcgtcg aagggcatct aaccaaagcg
180
gtagaagaaa caaagctttc aaaagaaaat cagacaagag caaaagaatc tgatttttca
240
gatactctga gtccaagcaa ggaaaaaagc agtgacgaca ctacagacgc ccaaatggat
300
gagcaagacc taaatgagcc tcttgccaaa gtgtcccttt taaaagatga cttgcagg
358

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<210> 6084

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6084

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Met Glu Glu Lys Glu Gln Glu Leu Gln Ala Lys Ile Glu Ala Leu Gln
1      5      10      15
Ala Asp Asn Asp Phe Thr Asn Glu Arg Leu Thr Ala Leu Gln Glu Lys
20     25     30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
35     40     45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
50     55     60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

```

```

65          70          75          80
Met Asp Glu Gln Asp Leu Asn Glu Pro Leu Ala Lys Val Ser Leu Leu
      85          90          95
Lys Asp Asp Leu Gln
      100

<210> 6085
<211> 2307
<212> DNA
<213> Homo sapiens

<400> 6085
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60
agccaggtgg actttgacaa tcccgactac gagaggttcc ctaatttcca aaatgtggtt
120
ggttacgaaa cagtgttgg ccttggtgat gttctttaca tcccaatgta ctggtggcat
180
cacatagagt cattactaaa tggggggatt accatcactg tgaacttctg gtataagggg
240
gctccacccc ctaagagaat tgaatatacct ctcaaagctc atcagaaagt ggccataatg
300
agaaaacattg agaagatgct tggagaggcc ttgggggaacc cacaagaggt ggggcccttg
360
ttgaacacaa tgatcaaggg ccgatacaac tagcctgcca ggggtcaagg cctcctgcca
420
ggtgactgct atcccgcca caccgcttca ttgatgagga caggagactc caagcgctag
480
tattgcacgc tgcacttaat ggactggact cttgccatgg cccaggagtc aggtgttttg
540
agcgaggcag ggcagttggc actccaactcc tatttggagg gacttcatac ccttgccctc
600
tgtgcccctg caccttctct ctctgcccc cgccataaagt cctgcattca gtgtgtggag
660
ccccagcttt tggttgtcat catgtctgtg tgtatgttag tctgtcaact tcggaatgtg
720
tgcggtgttg tgcattgaca cgcatttatg tatctgttcc ctgttccttc tgggtcaggc
780
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840
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960
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1020
ccttcctgtg agagaggatt agatagggtt ccaactgggc ctacaagctc aagccataca
1080
taaaaggacc ttgggacata agaaccaatg attgtgcata agttctaaat tagagacaca
1140
tatagtttct ctctttcagc accagctctt gcccttatgc tgggtaccaa gggagtcttc
1200
ctagctgttg cttctctagg ttctaggggt gcaagcctct gtgtgtttgt ttgtgtgtgt
1260

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ctgtgtgtgc gtatcacact aggggtgcaa gcctctgggt gtgtgtgtgt gtgtgctgc
 1320
 gtgtgtgtgt gtgtgtccgt gtgtgtgtgt gtgtgtgtcc acactggcca gcctccctac
 1380
 ttaccaaggt tctccactgc ttaccttttc cagtgggaca gtacagtgtg agcccccggt
 1440
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 1500
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 1560
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 1680
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 1800
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 1860
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 1920
 gccctgtgtc tcctcacctc tgctcctgtc ttcacacct tctctctgga agggaagagg
 1980
 agttggaagg tctctggttt tcttttcttt tttttttttt ttgccaaagg tttacttcca
 2040
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 2100
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 2160
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 2220
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 2280
 aaaaaaaaaa aaaaaaaaaa aaaaaaa
 2307

<210> 6086

<211> 84

<212> PRT

<213> Homo sapiens

<400> 6086

Met Leu Gly Thr Lys Gly Val Leu Leu Ala Val Ala Ser Leu Gly Ser
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 Arg Gly Ala Ser Leu Cys Val Phe Val Cys Val Cys Leu Cys Val Arg
 20 25 30
 Ile Thr Leu Gly Val Gln Ala Ser Gly Cys Val Cys Val Cys Ala Cys
 35 40 45
 Val Cys Val Cys Val Ser Val Cys Val Cys Val Cys Val His Thr Gly
 50 55 60
 Gln Pro Pro Tyr Leu Pro Arg Phe Ser Thr Ala Tyr Leu Phe Gln Trp
 65 70 75 80
 Asp Ser Thr Val

<210> 6087
<211> 1506
<212> DNA
<213> Homo sapiens

<400> 6087
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60
cggggctgcc agctcctcgg gcttcgtagc tcttggcccc gggacctact aagtgctcgg
120
ctcttgtccc aagagaagcg ggcagcggaa acgcactttg ggtttgagac tgtgtcggaa
180
gaggagaagg ggggcaaagt ctatcagggtg tttgaaagtg tggttaagaa gtatgatgtg
240
atgaatgata tgatgagtct cggcatccat cgtgtttgga aggatttgct gctctggaag
300
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360
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420
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480
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720
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780
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840
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900
gaagatgcag gctttcaca ggtagcttac gaaagtctaa catcaggcat tgtggccatt
960
cattctggct tcaaacttta attcctttcc tatcatggag catgaaccag tcatatcctg
1020
ttgaaagcct ggaactgaag gataatctgg caaatgagac agcagcagag catctcctct
1080
taaggatagc tgccttggac tcatgtttga atcgaacagt ctcaaagtgg aagaacaaat
1140
tcttgtcact tttttacagc tttctttgga gctgcttcag tccatctccc agaggcattt
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1320
cttctagagg gatgatagat catttgaacc caatgacaat ttttaaccag aaaattta
1380

tgtacctgaa tcaacctttc agcctaggac gaagtctagg cccaagtcag agtattaatg
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 1500
 aaaaaa
 1506

<210> 6088
 <211> 326
 <212> PRT
 <213> Homo sapiens

<400> 6088
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 Ser Arg Ala Met Arg Gly Cys Gln Leu Leu Gly Leu Arg Ser Ser Trp
 20 25 30
 Pro Gly Asp Leu Leu Ser Ala Arg Leu Leu Ser Gln Glu Lys Arg Ala
 35 40 45
 Ala Glu Thr His Phe Gly Phe Glu Thr Val Ser Glu Glu Lys Gly
 50 55 60
 Gly Lys Val Tyr Gln Val Phe Glu Ser Val Ala Lys Lys Tyr Asp Val
 65 70 75 80
 Met Asn Asp Met Met Ser Leu Gly Ile His Arg Val Trp Lys Asp Leu
 85 90 95
 Leu Leu Trp Lys Met His Pro Leu Pro Gly Thr Gln Leu Leu Asp Met
 100 105 110
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<210> 6089

<211> 4211

<212> DNA

<213> Homo sapiens

<400> 6089

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<211> 839

<212> PRT

<213> Homo sapiens

<400> 6090

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65      70      75      80
Pro Glu Leu His Thr Lys Glu Gln Ile Leu Glu Leu Leu Val Leu Glu
85      90      95
Gln Phe Leu Thr Ile Leu Pro Glu Glu Phe Gln Pro Trp Val Arg Glu
100      105      110
His His Pro Glu Ser Gly Glu Glu Ala Val Ala Val Ile Glu Asn Ile
115      120      125
Gln Arg Glu Leu Glu Glu Arg Arg Gln Gln Ile Val Ala Cys Pro Asp
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Val Leu Pro Arg Lys Met Ala Thr Pro Gly Ala Val Gln Glu Ser Cys
145      150      155      160
Ser Pro His Pro Leu Thr Val Asp Thr Gln Pro Glu Gln Ala Pro Gln
165      170      175
Lys Pro Arg Leu Leu Glu Glu Asn Ala Leu Pro Val Leu Gln Val Pro
180      185      190
Ser Leu Pro Leu Lys Asp Ser Gln Glu Leu Thr Ala Ser Leu Leu Ser
195      200      205
Thr Gly Ser Gln Lys Leu Val Lys Ile Glu Glu Val Ala Asp Val Ala
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Val Ser Phe Ile Leu Glu Glu Trp Gly His Leu Asp Gln Ser Gln Lys
225      230      235      240
Ser Leu Tyr Arg Asp Asp Arg Lys Glu Asn Tyr Gly Ser Ile Thr Ser
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Met Gly Tyr Glu Ser Arg Asp Asn Met Glu Leu Ile Val Lys Gln Ile
260      265      270
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275      280      285
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Lys Gln Ser Thr His Gly Glu Arg Gly His Arg Cys Ser Asp Cys Gly
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Lys Phe Phe Leu Gln Ala Ser Asn Phe Ile Gln His Arg Arg Ile His
355      360      365
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370      375      380
Gln Arg Val His Leu Thr Gln His Gln Arg Val His Thr Gly Glu Lys
385      390      395      400
Pro Tyr Lys Cys Gln Val Cys Gly Lys Ala Phe Arg Val Ser Ser His
405      410      415
Leu Val Gln His His Ser Val His Ser Gly Glu Arg Pro Tyr Gly Cys
420      425      430
Asn Glu Cys Gly Lys Asn Phe Gly Arg His Ser His Leu Ile Glu His
435      440      445
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 Lys Gln Gly Ile Pro Met Lys Glu Ile Leu Gly Gln Pro Ser Ser Lys
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 Arg Met Asn Tyr Ser Glu Val Pro Tyr Val His Lys Lys Ser Ser Thr
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 690 695 700
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 Ile Cys Gly Lys Ala Phe Gly Tyr Ser Ser Asp Leu Ile Gln His Tyr
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 Arg Thr His Thr Ala Glu Lys Pro Tyr Gln Cys Asp Ile Cys Arg Glu
 740 745 750
 Asn Val Gly Gln Cys Ser His Thr Lys Gln His Gln Lys Ile Tyr Ser
 755 760 765
 Ser Thr Lys Ser His Gln Cys His Glu Cys Gly Arg Gly Phe Thr Leu
 770 775 780
 Lys Ser His Leu Asn Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
 785 790 795 800
 Phe Gln Cys Lys Glu Cys Gly Met Asn Phe Ser Trp Ser Cys Ser Leu
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<210> 6091

<211> 1336

<212> DNA

<213> Homo sapiens

<400> 6091

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<210> 6092

<211> 118

<212> PRT

<213> Homo sapiens

<400> 6092

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Thr Pro Asn Trp Tyr Trp Val Leu Gly His Pro Asn Leu Ile Arg Asp
      35           40           45
Val Thr Arg Gln Val Pro Ser Pro Pro Ser Gly Phe Arg Leu Pro Ser
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Ser Arg His Glu Gly Pro Ser Pro Pro Arg Asp Leu Gly Thr Ser Gly
      65           70           75           80
Pro Ser Arg Ala Ala Ser His Lys Pro Ser Asn Glu Gln Arg Asp Ala
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<210> 6093

<211> 1998

<212> DNA

<213> Homo sapiens

<400> 6093

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960

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<210> 6094

<211> 136

<212> PRT

<213> Homo sapiens

<400> 6094

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Trp	Asn	Pro	Lys	Pro	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Asp	Gly	Leu	Leu
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Ser	Cys	Asn	Phe	Leu	Gly	Glu	Glu	Thr	Phe	Ser	Ser	Phe	Pro	Phe	Leu
65				70				75				80			
Val	His	Pro	Cys	Thr	Leu	Val	Leu	Ser	Gln	Pro	Leu	Pro	His	Ile	Val

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<210> 6095
 <211> 441
 <212> DNA
 <213> Homo sapiens

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<210> 6096
 <211> 97
 <212> PRT
 <213> Homo sapiens

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35     40     45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Val Val Trp Gly Glu Cys
50     55     60
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
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<210> 6097
 <211> 2404

<212> DNA

<213> Homo sapiens

<400> 6097

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<212> PRT

<213> Homo sapiens

<400> 6098

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 Ala Leu Glu Leu Ser Pro Ser Phe His Gln Lys Asn Trp Gln His Trp
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 Glu Glu Xaa Thr Cys Trp Val Val Gly Arg Ser Gly Ala Glu Ala Arg

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Phe Tyr Pro Leu Ser Leu Leu Glu Thr Gly Ser Asp Leu Leu Leu Phe
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Ser Glu Val Gln Ser Cys Arg His Phe Cys Asn Lys Ile Trp Asn Ala
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Phe Leu Glu Pro Leu Gly Thr Leu Gly Tyr Cys Gly Ala Val Gly Leu
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<210> 6099

<211> 3957

<212> DNA

<213> Homo sapiens

<400> 6099

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<211> 1102

<212> PRT

<213> Homo sapiens

<400> 6100

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Lys Val Ala Ile Lys Ile Ile Asp Lys Thr Gln Leu Asp Glu Glu Asn		
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Leu Lys Lys Ile Phe Arg Glu Val Gln Ile Met Lys Met Leu Cys His		
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Pro His Ile Ile Arg Leu Tyr Gln Val Met Glu Thr Glu Arg Met Ile		
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Tyr Leu Val Thr Glu Tyr Ala Ser Gly Gly Glu Ile Phe Asp His Leu		
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Val Ala His Gly Arg Met Ala Glu Lys Glu Ala Arg Arg Lys Phe Lys		
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Gln Ile Val Thr Ala Val Tyr Phe Cys His Cys Arg Asn Ile Val His		
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Arg Asp Leu Lys Ala Glu Asn Leu Leu Leu Asp Ala Asn Leu Asn Ile		
180	185	190
Lys Ile Ala Asp Phe Gly Phe Ser Asn Leu Phe Thr Pro Gly Gln Leu		
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Leu Lys Thr Trp Cys Gly Ser Pro Pro Tyr Ala Ala Pro Glu Leu Phe		
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Glu Gly Lys Glu Tyr Asp Gly Pro Lys Val Asp Ile Trp Ser Leu Gly		
225	230	235
Val Val Leu Tyr Val Leu Val Cys Gly Ala Leu Pro Phe Asp Gly Ser		
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Thr Leu Gln Asn Leu Arg Ala Arg Val Leu Ser Gly Lys Phe Arg Ile		
260	265	270
Pro Phe Phe Met Ser Thr Glu Cys Glu His Leu Ile Arg His Met Leu		
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Val Leu Asp Pro Asn Lys Arg Leu Ser Met Glu Gln Ile Cys Lys His		
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Lys Trp Met Lys Leu Gly Asp Ala Asp Pro Asn Phe Asp Arg Leu Ile		
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Ala Glu Cys Gln Gln Leu Lys Glu Glu Arg Gln Val Asp Pro Leu Asn		
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Glu Asp Val Leu Leu Ala Met Glu Asp Met Gly Leu Asp Lys Glu Gln		
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Thr Leu Gln Ala Glu Gln Ala Gly Thr Ala Met Asn Ile Ser Val Pro		
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Gln Val Gln Leu Ile Asn Pro Glu Asn Gln Ile Val Glu Pro Asp Gly		
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Pro Arg Thr Glu Val Met Glu Asp Leu Gln Lys Leu Leu Pro Gly Phe		
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Pro Gly Val Asn Pro Gln Ala Pro Phe Leu Gln Val Ala Pro Asn Val		
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Asn Phe Met His Asn Leu Leu Pro Met Gln Asn Leu Gln Pro Thr Gly		
450	455	460
Gln Leu Glu Tyr Lys Glu Gln Ser Leu Leu Gln Pro Pro Thr Leu Gln		

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 1320
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 1447

<210> 6102
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 6102
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 Val Ala Tyr Arg Ser Ser His Gly Asp Leu Arg Pro Arg Ala Ser Ala
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 Leu Ala Met Val Ser Gly Asp Gly Phe Leu Val Ser Arg Pro Glu Ala
 35 40 45
 Ile His Leu Gly Pro Arg Gln Ala Val Arg Pro Ser Val Arg Ala Glu
 50 55 60
 Ser Arg Arg Val Asp Gly Gly Gly Arg Ser Pro Arg Glu Pro Asp Gly
 65 70 75 80
 Arg Gly Arg Ser Arg Gln Ala Arg Phe Ser Pro Tyr Pro Ile Pro Ala
 85 90 95
 Val Glu Pro Asp Leu Leu Arg Ser Val Leu Gln Gln Arg Leu Ile Ala
 100 105 110
 Leu Gly Gly Val Ile Ala Ala Arg Ile Ser Val
 115 120

<210> 6103
 <211> 309

<212> DNA

<213> Homo sapiens

<400> 6103

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120
agaacctatg ccttgatgaa gaagattggg cagtccccag tgagagtcct gaaggagatt
180
gacggcttcg tcctgaaccg cctgcagtac gccgtcatca gtgaggcctg gagactggtg
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<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

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			20					25					30		
Leu	Asn	Arg	Leu	Gln	Tyr	Ala	Val	Ile	Ser	Glu	Ala	Trp	Arg	Leu	Val
	35					40					45				
Glu	Glu	Glu	Ile	Val	Ser	Pro	Ser	Asp	Leu	Asp	Leu	Val	Met	Ser	Asp
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65					70										

<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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120
gggatgaagt ggtgtctccc ctccatctg ctctgcaggg gtccctcagg ctccctatca
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240
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420

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540
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1320
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1620
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1680
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1846

<210> 6106

<211> 405

<212> PRT

<213> Homo sapiens

<400> 6106

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Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe
35      40      45
His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
50      55      60
Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Ser Arg His Arg Lys
65      70      75      80
Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
85      90      95
Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
100     105     110
His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
115     120     125
Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
130     135     140
Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
145     150     155     160
Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
165     170     175
Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
180     185     190
Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
195     200     205
Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala
210     215     220
Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
225     230     235     240
Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
245     250     255
Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
260     265     270
Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
275     280     285
Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
290     295     300
Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
305     310     315     320
Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
325     330     335
Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
340     345     350
Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
355     360     365
Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
370     375     380
Asn Thr Ser Lys Gly Phe Gln Arg Pro Val Tyr Leu Phe His Lys Ala
385     390     395     400
Arg Ser Pro Ser His
405

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<210> 6107
 <211> 896
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 420
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 480
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 540
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 660
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 720
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 780
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<210> 6108
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 6108
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 20 25 30
 Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg
 35 40 45
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
 50 55 60
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
 65 70 75 80
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp